

THE
SOCIAL AND EMOTIONAL
DEVELOPMENT OF
THE PRE-SCHOOL CHILD

BY

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PREFACE

THE study reported in this book was undertaken as part of the research programme of the Canadian National Committee for Mental Hygiene. It represents a systematic inquiry into the social and emotional behaviour of pre-school children as observed from day to day in a nursery school. The observations were all made in the McGill University Nursery School, which was financed in 1925 for five years by the Laura Spelman Rockefeller Memorial Fund. The study extended over a period of three years, and it concerned children between the ages of two and five years who were in attendance at the above nursery school and child laboratory.

An attempt was made to devise behaviour scales of social and emotional development somewhat similar to the developmental schedules of Gesell, published in his book on *The Mental Growth of the Pre-school Child*. These Scales are described in the following pages. They represent a research method for the study of children's social and emotional behaviour rather than a system for mental measurement. The book will therefore be of particular interest to psychologists and other research workers engaged in the field of child study. The style of the book is simple but scientific, and care has been taken to avoid didactic statements and moralization. Readers who have practical aims in view will readily draw their own conclusions for educational and such like purposes.

Much of the material in the book is descriptive and will, no doubt, be interesting to teachers, parents, and students of young children. It is hoped that leaders of child-study and parent training groups will find the book suggestive and helpful in their discussions. Perhaps the greatest value of the book will be in its usefulness as a guide for students in child-psychology and child-training courses. It should be of assistance in training students how to observe and how to analyse observational material.

The book is divided into four parts. The three chapters in

Part I describe the approach to the problem, the preliminary methods adopted, and the devising of the Social and Emotional Development Scales. In Part II the Social Development Scale is given, together with fairly detailed description of the social behaviour of nursery school children. The Emotional Development Scale is presented in Part III, followed by description in detail of the emotional behaviour of children in a nursery school. Results obtained from the application of the Development Scales in the McGill Nursery School are given in Part IV. In Chapter XVII of this part is described a Pre-school Character Rating Chart, which is a more practical device for rating social and emotional behaviour and certain temperamental and character traits. A few individual studies made with the aid of the Development Scales and the Character Rating Chart are presented in Chapter XVIII. Finally, a short bibliography of references and an Index are given at the end of the book.

Photographic illustrations of children's behaviour are scattered throughout the text. These were all taken by the writer with an ordinary snap-shot camera. They are pictures of events exactly as they happened during the school day. None of them was specially posed. It is to be regretted that there are among them few good close-up studies of emotional expression. Although numerous attempts were made to obtain such photographs, the facial expression or the position of the children changed as soon as the camera was placed near enough to obtain a good picture.

The indebtedness of the writer to authors mentioned in the text and bibliography and to many others is obvious. An expression of gratitude is here extended to the writer's former teachers, to psychologists and other authors whose works have contributed suggestive inspiration and material for this volume. It is desired to thank Miss G. A. Watkins, the Senior Teacher at McGill University Nursery School, for her helpful suggestions and criticism, and Miss V. L. Davidson for her invaluable assistance in scoring the scales and in preparing the manuscript. Lastly, the writer wishes to thank her husband for his kindly advice, criticism and encouragement, and for reading and checking over the manuscript.

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PART I

APPROACH TO THE PROBLEM

CHAPTER I

INTRODUCTION

THE problem of finding out the nature and rate of mental development in pre-school children has been made much easier, in the last few years, by the establishment of various standardized test situations and the classification of normative behaviour. Moreover, the scientific study of child behaviour, which the making of these tests necessitates, has added greatly to our knowledge of pre-school mental development. Among such behaviour scales and mental tests for pre-school children the more important to date are the Stanford and the Kuhlman-Binet tests, Gesell's developmental schedules, Stutsman's performance tests, and Wallin's, Baldwin's, Goodenough's, Bayley's, and Hallowell's tests.¹

These tests and behaviour scales in most instances were designed to measure the development of so-called intelligence, or the ability to adjust to certain kinds of new situations. More specifically they indicate a child's development relative to other children, with regard to sensory discrimination, motor co-ordination, sensory-motor co-ordination, attention, memory, association of ideas and reasoning. They are concerned, therefore, chiefly with the development of more and more discriminating and skilful behaviour with regard to inanimate objects and non-social situations.

Experimental studies made with the help of these devices possess certain advantages over the descriptions of the behaviour of individual children, and the theoretical speculations which constituted the bulk of child psychology two or three

¹ The books and articles containing these tests are given in the Bibliography at the end of the book.

decades ago. Such studies isolate problems and thus clarify knowledge. They offer more reliable information, since they combine observations on many children; and they are more practical in that both situation and behaviour are described in such exact terms that repetition and comparison can be made. They have a disadvantage in that they take into account at one time so few mental factors. Each of the mental tests for instance throws light only on some specific aspect of behaviour. Even combined scales of several tests measure only certain aspects of mental development. In fact, nearly all the existing scales of pre-school behaviour measure only linguistic and motor skills.

There are as yet no standardized tests and, to the writer's knowledge, only two or three partial scales of social behaviour of the pre-school child. This aspect of mental development has been given only very general description. The same may be said with regard to the development of emotional behaviour and the motivation of behaviour. We are still obliged to go back to the older literature, to rely on individual studies, or to make unwarranted inferences from adult psychology in order to get information on these aspects of child psychology.

It was with a view to the collecting of information which would in some measure fill the above-mentioned gap in our behaviour scales and our knowledge of pre-school mental development that the writer undertook the study described in this book. Social and emotional behaviour were selected for study as these are topics of current interest and controversy, and seem to be intimately linked together. No attempt was made to study the motivation of behaviour, much as the information is required. This would include a study of the development of desires, incentives, and instinctive drives, and would make a separate and complete topic for another volume.

The aim was to find out from the literature and from first-hand observation of pre-school children in a nursery school, what constitutes the nature of their social and emotional behaviour, and how this may be described, classified and perhaps arranged in a scale. For this purpose about fifty children were observed almost daily by the writer at the McGill University Nursery School for a period of three years.

The children attended the school from 9 a.m. to 3 p.m.

five days a week for nine months in the year. They were all of them from average or superior homes and their parents were English-speaking Canadians. Roughly speaking they were normal children—that is, they had no marked physical or mental defects. Some of the children, however, came to the school as conduct or behaviour problems. The group under observation was thus small and somewhat selected. The conditions under which they were observed were essentially laboratory conditions, the school being the laboratory, and the children were only observed closely during the time they were at school. The findings described in the following chapters, therefore, are offered to the reader only as suggestions to which considerably more information of a similar nature must be added, before an adequate knowledge of the social and emotional development of young children is attained.

THEORETICAL CONSIDERATIONS

Before considering any method of approach to the problem it seemed advisable first to inquire into the meaning of the terms social and emotional development, and to adopt some working hypothesis or definition with regard to them. The meaning of the term *social development* is more or less clear, and is very much the same for the different schools of psychologists, for sociologists, teachers, and the ordinary educated laymen. The term almost invariably refers to the behaviour of the individual with regard to other individuals or groups, in other words to social behaviour. Social development consists in the acquisition of an increasing number of socially acceptable reactions with regard to others, and in the evolution of more and more adequate or suitable adjustments to social situations.

Emotional development is not so easily described. In the first place there is disagreement among psychologists as to the meaning of "emotional." For some the word denotes certain kinds of behaviour, while for others it refers to certain conscious or sub-conscious phenomena not necessarily expressed in overt behaviour. If the latter use of the term were to be adopted it would rule out the possibility of studying the emotional life of pre-school children, since language is so incompletely developed at this age as to afford little or no clue to the conscious experience of the child. On the other hand, every one is agreed that the young child is often emotional

in his behaviour. It was therefore decided for the purpose of this study to adopt the meaning of "emotional" that refers to behaviour only.

Some behaviouristic psychologists describe emotion as a pattern reaction involving chiefly responses of the smooth muscles and glands of the body. Others describe emotional behaviour more in terms of responses of voluntary or skeletal muscles which accompany the visceral responses. Running away, crouching, hiding, for instance, are regarded as forms of fear, but these are responses of the large body muscles.

The most satisfactory description of emotion seems to lie in a compromise between these two views. Close observation of individuals cringing in fear or shouting in anger generally reveals also evidences of increased activity of the sympathetic nervous system and certain duct and ductless glands. Such evidences are, rapid breathing, pallor, perspiration, dilated pupils, and so forth. In all probability both visceral and skeletal responses are involved in emotion, though the former is the most essential feature. It is fairly generally agreed that more marked reaction of the voluntary muscles does not necessarily imply correspondingly greater emotion, though this may be true in some cases. For example, one cannot be sure that the louder a child shouts the greater is his distress, though this may sometimes be true. On the other hand, it is generally conceded that the greater the response of the smooth muscles and glands the greater the emotion—that is, the more the individual is emotionally disturbed.

Not only is emotional behaviour a controversial subject among psychologists, but so also is the question of emotional development. Some psychologists believe that emotional reactions are inherited and unchanging things. Emotional behaviour is regarded as primitive or infantile behaviour, and development can only mean control of it, or emancipation from it. Others believe that although emotional reactions remain essentially the same throughout the lifetime of the individual, they may be aroused by different objects or situations in the course of development. Development would therefore consist in changing the attachments of emotional reactions to more and more complex and socially approved situations. For instance, an infant may struggle in rage when his arms are held, a schoolboy may fly into a rage when another insults him, while a grown man may exhibit an outburst of

rage at a social injustice. There are still other psychologists who hold that the emotional response may not only become associated progressively with a series of different situations, but also that the nature of the response itself may change. An infant may kick and wave his arms when his feet are held, and an older child may behave in the same way when he is teased without actually being held. The older child may also react to either situation by merely shouting in protest without kicking and slashing his arms.

No definite position was taken with regard to the meaning of "emotional development" till after several months' daily observation of the children in the nursery school. On the basis of this empirical observation it was decided to adopt, as a working basis for the study, the hypothesis that emotional development consists in the decreasing frequency of intense emotional responses, in the progressive transfer of responses to a series of stimuli determined by experience and social approval, and in the gradual change of the nature of the overt responses in accordance with social dictates. This view of development is really a combination of the standpoints mentioned in the previous paragraph. All three theories were found to be based on facts observable in the children's behaviour.

It was obvious from the outset of this study that social and emotional development are intimately connected. Social situations both cause and control emotional behaviour and even determine the nature of its development. In fact, emotional development might almost be considered as a form of social development. But since some emotional behaviour is not prompted directly by social situations, and since emotional behaviour in general constitutes a separate psychological problem, it seemed desirable to think of the two aspects of behaviour separately, but to study them conjointly in the children.

In brief, "social development" in this study is regarded as increase in ability to adjust to social situations, especially in ability to act or behave in a socially desirable way. The more markedly emotional aspects of such adjustments are included in the term "emotional development". This latter term is taken to mean increase in ability to adjust to emotion-producing situations in both a biologically and socially adequate way, and a progressive substitution of emotion-producing situations

according to the dictates of chance experience and social demand. Social desirability is the chief criterion of development, though physiological, motor, and intellectual maturity are in part determining factors.

If it is desired to preserve the misleading expression "general intelligence" in psychology to denote ability to adjust, then ability to make social and emotional adjustments should be considered also as marks of intelligence. Many psychologists of the present day, however, are agreed that an individual instead of possessing general intelligence may have a number of "specific intelligences". There may, therefore, be such human capacities as "social intelligence" and "emotional intelligence", and these may be measurable in much the same way as are "language intelligence" and "motor intelligence",—that is, by measures of achievement to date in these fields of behaviour.

It might be expected that these different intelligences would be somewhat independent of each other—that is, they would show no high degree of correlation. On the other hand, there would probably be some correlation, since the same sensory and response mechanisms are involved in each, and since the test situations designed to measure specific intelligences do not completely isolate the desired adjustment problems. There is an overlapping in all test situations. For instance, the present language and performance tests do not eliminate either the social or the emotional situation. A child's ability to solve the problems set in the tests will be in part determined by his ability to make social and emotional adjustments. For this reason it seemed highly desirable to the writer that some scheme for roughly isolating and measuring social and emotional adjustments should be made. Although it is obvious that such a scheme could not eliminate other intelligence factors, still it would shift the emphasis and should form an essential complement to the already existing mental tests. The scales described in this book offer a tentative scheme of this sort.

PROPOSED PROCEDURE

A perusal of the literature disclosed the fact that remarkably little has been recorded regarding the social and emotional behaviour, as such, of pre-school children. A few descriptive and interpretative accounts have been given in which social, emotional, and other forms of behaviour have been classed

together. Baldwin,¹ however, describes the social behaviour of several individual children, and outlines five fundamental social attitudes of pre-school children. These he derived from a careful analysis of a "daily log" kept by Ethel Verry, on two groups of children. Arlitt extends this classification of social attitudes to nine. She also reports an observational study made by Florence Olesen on pre-school children entitled *A Study of Dramatic Play in Young Children*.

Andrus gives an *Inventory of the Habits of Children from Two to Four Years of Age* based upon observational studies. She separates emotional and social behaviour and gives an itemized list of four kinds of habit: Motor, Mental, Emotional, and Social. Gesell, in *The Mental Growth of the Pre-school Child*, describes mental development under four main headings: Motor, Language, Adaptive, and Personal-social. Under the last heading he classes together social and emotional behaviour along with other aspects of personality. Both he and Andrus adopted the method of systematic observation of children and devised behaviour scales for purposes of comparison.

Leslie Marston in his *Experimental Study of Introversion and Extroversion* describes the emotional behaviour of pre-school children with regard to certain socio-emotional situations, and classifies the responses into types. He also gives a rating scale for Introversion-Extroversion. Levy and Tulchin in two papers on "The Resistant Behaviour of Infants and Children", and Goodenough in an article on "The Emotional Behaviour of Young Children During Mental Tests", also record interesting observations on the behaviour of children in specific social and emotional situations. The scope of these studies, however, is not broad enough to allow one to use them as methods for determining the general standard of a child's social and emotional behaviour. There are many other social and emotional situations which may arise in a child's day which are not included in these experimental studies.

It seemed to the writer after considering the work of others, that the observational rather than the experimental method would be the most satisfactory for the purposes of this study. It was accordingly decided to make systematic observations on the social and emotional behaviour of children in their

¹ Reference to the works of the authors mentioned will be found in the Bibliography.

ordinary setting, after the manner of Andrus and Gesell. The conditions could be controlled to some extent if the children were observed only while they were in school. This would make a fairly uniform laboratory setting. On the other hand, the many diverse situations which occur in a school-day would offer a broader set of conditions than those offered by specific experiments.

The preliminary part of this study consisted in daily observation by the writer of the twenty children attending the nursery school. Records were kept daily and summed up weekly, describing the actual behaviour of each child in specific situations. Everything that could be regarded by the psychologist or by any educated person as social behaviour—that is, behaviour prompted by a social situation—was recorded. Similarly everything that might be regarded by any one as emotional or affective behaviour was recorded.

Although the findings and theories of other writers were kept in mind, and these no doubt influenced to some extent the nature of the behaviour items picked out by observation, yet an effort was made to keep the observations as unprejudiced as possible. It was desired first of all to make an inventory, similar to that of Ruth Andrus, of all possible forms of social behaviour and emotional behaviour exhibited by the young child. Attempt was made to record these observations only in terms of actual and specific behaviour, and not in terms of theoretical interpretation or of general significance. Some of the terms used by Andrus, for example, in her inventory were considered rather too general for the purposes of the present study. For instance, she gives as items for observation: "Does the child show annoyance at the action of any other child? Does the child become frightened when climbing?" The questions would still arise: how does the child show annoyance?, what particular action of the other child causes the annoyance?, how does one know that a child is frightened?, and so forth.

It was further decided to avoid in the beginning the adoption of any set method of classification either of social behaviour or of emotional behaviour. There is so much controversy among psychologists with regard to the classification of the latter that it was thought better to make general observations first, and then to study the empirical facts thus obtained and see if they would fall naturally into classes.

Lastly, it was proposed to find out from observed facts only what constitute stages of development in social and emotional behaviour. That is, how do the same children subsequently react to the same or similar situations, and which of these subsequent forms of behaviour are socially considered as improvements upon the earlier forms? The criterion of social approval must necessarily be vague and arbitrary. In this study it was determined by the teachers and the writer, by the children's parents, and by the children themselves, who really only reflect the attitudes of parents and teachers.

In the following chapter some of the findings from this preliminary series of observations are given. The method of construction of a tentative social and emotional development scale is described. A sample of the scale is presented, along with some of the results obtained from its application.

CHAPTER II

THE PRELIMINARY EXPERIMENT

FINDINGS FROM GENERAL OBSERVATION

THE twenty children in the McGill Nursery School were divided into two groups according to age. Those between the ages of two and a half and three and a half years (usually eight in number) played together in one room under the supervision of an assistant teacher. The other twelve between three and a half and five years of age played in another room supervised by the senior teacher. These groups are referred to in this book as Group A and Group B, respectively.

The numbers of the two sexes, boys and girls, were kept more or less even in each of the two school groups. The school routine was such that all the children played together for half the morning outdoors. They also had their dinner together and slept together in the same room. The two age groups therefore were separated only for little more than an hour each day during washing and free-play periods. This short separation, however, was found to facilitate greatly the task of observing differences in the behaviour of younger and older children, which might be considered as developmental differences.

A few marked differences in the social and emotional behaviour of children of different ages were noticed, but there was so much overlapping that it seemed impossible at first to construct anything in the way of an age scale. For example, the children in the younger group (A) appeared to do more experimental hitting, tapping and pushing than the older children in Group B. But it was also noticed that when a new child over three and a half years old was admitted to the school he would at first adopt the ways of the younger children. He would pull others' hair or slap them, apparently to see the effect, as no other provoking cause was evident. It seems as if this is one of the early forms of social behaviour and may be manifested at any age within the pre-school limit,

depending upon when the child makes his first contact with the group.

The most striking differences observed during the preliminary experiment, and indeed at any time, were individual rather than age differences in behaviour both social and emotional. Some children "went their own way" and left others alone, while others seemed as if they had to be always in the crowd. Some children "hung around" the adults for attention, others spoke to the grown-ups only when necessary, and still others opposed almost every suggestion or request made to them by an adult. Some children cried frequently, others scarcely at all. Some children rushed about and laughed with delight, others sat quietly or stood about, making as few movements as possible and smiling only faintly. Some shouted and squealed frequently, others fought, and others whined in a complaining way. There was so much in the first behaviour records, and such variety, that there seemed to be little or no order in them.

Gradually some loose sort of order became apparent in the observations of behaviour and certain major groups suggested themselves. The social behaviour could be divided into two groups according to the situation in which it occurred. First, there was behaviour with regard to other children, and secondly, there was behaviour with regard to adults. The emotional behaviour seemed to fall roughly into five groups—namely: (1) Tears, (2) Fear, (3) Anger, (4) Feelings, and (5) General Expression. Within the above seven groups it was found possible to classify items of behaviour which had been exhibited by one or more of the children under observation. In spite of the many individual differences it was noticed that some of the children reacted in a similar way to similar situations, and that some gave the same or similar reactions to different situations.

The last two emotional classes, Feelings and General Expression, included a mixed group of behaviour items. Some referred to reactions of a mildly affective nature and some to behaviour probably having emotional origin. "Feeling" was here taken in a broad sense to include expressions of pleasure, displeasure, excitement, quiescence, tension and relaxation, as suggested by Wundt's categories of feeling. It seemed advisable to include all feelingful behaviour at first under the general term "emotional", as it is so uncertain behaviouristically speaking where emotion ends and feeling begins.

Concisely stated items of behaviour were accordingly listed under the two main headings Social and Emotional, each with its sub-headings as mentioned above. Some of these items were characterized by the nature of the causal situation, and others by the nature of the behaviour. For instance, under the sub-heading "Tears" crying was a constant feature of each item, but the causal situation in each was different. On the other hand, in the "Anger" group of items the causal situation was in several instances the same, interruption and interference, but the nature of the response varied in each item.

The phrasing of these items was not always in strictly behaviouristic terms, because the work of analysing all the forms of social and emotional expression into their behaviouristic elements was only very incomplete at this time. Rather than omit from the list significant items which had been observed such as "shows fear of new situations or new things", it was decided to include them temporarily in this vague form. Later further analysis was made and, in the improved scale described in the next chapter, provision was made for the recording of the actual manner in which the child showed fear of new situations or things.

From the above-mentioned list of behaviour items a tentative scale for the estimation of social and emotional development was devised. The items were arranged in two columns on the left and right sides of a page, and were expressed more or less in the form of paired opposites. The list down the left side of the page constituted the more developed forms of behaviour, while those to the right of the page were the less developed forms. The criteria of development were subsequent modes of behaviour exhibited by individual children, and also the behaviour of children of different age levels as actually observed in the nursery school. A space was left down the middle of the page to allow for the marking of the items.

The number of items was reduced as much as possible so that the scale would not be unnecessarily long and tedious to score. At the same time effort was made to cover all the forms of behaviour observed in the children, which seemed to be of social or emotional significance. It was found difficult to express in exact terms stages of behaviour, which differed merely in frequency of occurrence rather than in changes in the nature of the behaviour. For instance, older children tend to play by themselves less frequently than younger children.

Playing alone is of significance from the point of view of social development, yet all children play by themselves at times. The question to ask from the social standpoint is whether the child seldom or frequently plays alone.

When adverbs like "frequently", "usually", "occasionally" are introduced into a scale too much scope is allowed for the judgment and prejudice of the person doing the marking. It seemed, however, unavoidably necessary to include qualifying adverbs of this kind in some of the items. This was done as rarely as possible, and in each case only such gross differences in frequency were required to be judged that individual differences of opinion among scorers would be reduced to a minimum. The necessity for including such items occurred mostly in the social scale since many social situations recur frequently. Emotional situations are of rarer occurrence.

Ruth Andrus partly solved the problem of frequency of an event by asking her raters to score each item with regard to three degrees of frequency, "very often, sometimes, or never". This greatly lengthens and complicates the work of the rater and still leaves considerable scope for individual judgment. Since her scale was for use by several raters the different opinions of each would no doubt counterbalance one another to some extent. The tediousness of making judgments upon, and scoring a long list of items is nevertheless a very real problem and one to be avoided if possible, as the writer has found by experience.

The Tentative Scale for Social and Emotional Development.

Some illustrative examples of the items in the first Social and Emotional Development Scale are given below. It is not considered necessary to present the whole scale since many of the items are contained in the final scales, and these are described in detail in succeeding chapters. The chief interest of the tentative scale lies in the problems it presents, some of which were partially resolved before the final scales were constructed.

There were a hundred and forty-six paired items in the tentative scale, fifty-seven in the social part and eighty-nine in the emotional part. Twenty-six of the social items referred to behaviour with regard to other children, and thirty-one referred to behaviour with reference to adults. Under the heading "Tears" in the Emotional Scale there were nineteen items, under "Fear" there were fifteen, under "Anger"

eighteen, under "Feelings" twenty-four, and under "General Expression" thirteen. These items were at first all written in the present tense, but were later changed to the past tense, as this sounded less ambiguous and was easier to mark.

Twenty forms were typewritten, one for each of the children to be scored. After a month's daily observation of the children the items were checked on the scale (1) if the left-hand item applied, (0) if the right-hand item applied, or (—) if no observation had been made with regard to the particular item. Items involving language were also marked (—) if the child had not yet developed speech. A percentage score was calculated for each child, allowing a point for each (1) mark out of the total number of items marked (1) or (0). Percentage scores were found for the social and emotional parts separately, and for the complete scale.

SELECTED ITEMS FROM THE TENTATIVE SCALE

I. SOCIAL DEVELOPMENT

<i>More Developed.</i>		<i>Less Developed.</i>
<i>With Children.</i>		
1. Usually played with others outdoors		Usually played alone outdoors
2. Usually played with others indoors		Usually played alone indoors
x6. Has not domineered or tried to assert self against others' will		Has domineered or pressed for leadership
7. Often spoken to other children		Seldom spoken to other children
10. Protected or helped others		Ignored others' needs
11. Shared toys or treats with others		Did not offer to share with others
13. Has not claimed others' toys		Claimed others' toys
x16. Did not tease other children		Teased other children
x17. Was appreciative, called attention to others' work		Was indifferent to others' achievement
x22. Was never unpopular with children		Has been sometimes unpopular with children
x23. Did not show jealousy of other children		Showed jealousy of other children, sought their place
x24. Did not complain of others		Complained of others
Score		

<i>More Developed.</i>		<i>Less Developed.</i>
<i>With Adults.</i>		
26. Sat beside or spoke to adults		Always held aloof from adults
28. Co-operated with adults in school routine		Did not co-operate in school routine
x31. Did not try to irritate adults		Tried to irritate adults
32. Was never obstinate with adults		Was obstinate with adults, fought, called names
x36. Did not do forbidden things in adult's absence		Did forbidden things in adult's absence
x37. Only occasionally sought adult's attention		Constantly sought adult's attention, intrusive
x38. Did not frequently seek attention by trying to be different		Frequently sought attention by trying to be different from others
x39. Did not tell fanciful stories to gain privilege or make impression		Told fanciful stories to make impression or gain privilege
x40. Did not show off to audience by loud talking or display		Showed off to audience by loud talking or display
x41. Was not continually seeking praise		Appealed continually for praise and approval
x42. Did not ask thoughtless questions to gain attention		Asked thoughtless questions to gain attention
44. Did not show indifference to adult disapproval		Showed indifference to adult disapproval
45. Occasionally sought adult approval		Never sought adult approval
48. Was willing to be helped		Was not willing to be helped
49. Asked help when needed		Did not ask help when needed
Score		

II. EMOTIONAL DEVELOPMENT

<i>More Developed.</i>		<i>Less Developed.</i>
<i>Tears.</i>		
1. Has not cried on arrival		Has cried on arrival
2. Has not cried when time to go home		Has cried when time to go home
3. Has not cried when undressed		Has cried when undressed
5. Has not cried at nap-time		Has cried at nap-time
10. Has not cried when slightly hurt		Has cried when slightly hurt
12. Has not cried at failure to get adult's attention		Has cried at failure to get adult's attention

APPROACH TO THE PROBLEM

<i>More Developed.</i>		<i>Less Developed.</i>	
14.	Has not cried when thwarted by adults or children		Has cried when thwarted by adults or children
19.	Usually tried to control tears		Usually made no attempt to control tears
	Score		
<i>Fear.</i>			
20	Has not shown fear by screaming, crying, or trembling		Has shown fear by screaming, crying, or trembling
21.	Has not shown fear by exclaiming, or avoiding		Has shown fear by exclaiming, or avoiding
22.	Did not quiver nervously at noises or the unexpected		Quivered nervously at noises or the unexpected
23.	Did not show fear of new situation or new things		Showed fear of new situation or new things
24.	Did not show fear of strangers		Showed fear of strangers
30.	Did not show fear at sight of blood		Showed fear at sight of blood
x32.	Has not shown fear of blame by lying		Has lied for fear of reproof or blame
x33.	Has not shown fear of punishment or reproof by ignoring adult's call		Has shown fear of punishment or reproof by ignoring adult's call
	Score		
<i>Anger.</i>			
35.	Has not lain on floor and kicked in temper		Has lain on floor and kicked in temper
37.	Has not fought and struggled in anger		Has fought and struggled in anger
x40.	Has taken refusals pleasantly		Has usually protested refusals
41.	Usually pleaded or tried to persuade offenders		Usually scolded offenders
42.	Usually turned to active or other occupation when annoyed		Usually continued to fight over trouble when annoyed
x43.	Did not push when interrupted		Pushed when interrupted
44.	Did not hit when interrupted		Hit when interrupted
47.	Usually recovered quickly from annoyance		Usually remained annoyed for many minutes
49.	Did not sulk when reprimanded		Sulked when reprimanded
	Score		

PRELIMINARY EXPERIMENT

17

More Developed. *Feelings.*

- 53. Has not shown strong dislikes for any food or things
- x56. Was not depressed by criticism
- x57. Was encouraged to further effort by failure or criticism
- 58. Was usually encouraged to further effort by success
- x60. Was not self-conscious, did not notice observation
- x62. Was usually self-confident
- 66. Willingly left interesting occupation upon reasonable request
- 68. Did not show excitement by jumping about, roughness, or impatience
- 69. Did not show excitement by tense muscles, or speechless trembling
- 72. Was not excited by numbers of people or children
- 73. Showed affection for adults by approach or speech
- 74. Showed affection for children by approach or speech

Score

Less Developed.

- Has shown strong dislikes for certain foods or things, for . . .
- Was discouraged and depressed by criticism
- Was not encouraged to further effort by failure or criticism
- Was usually content with success, made no further effort
- Was self-conscious, noticed observation
- Usually lacked self-confidence
- Would not leave interesting occupation upon reasonable request
- Showed excitement by jumping about, roughness, or impatience
- Showed excitement by tense muscles, or trembling
- Was very excited by numbers of people or children, was distracted, raised voice
- Did not show affection for adults
- Did not show affection for children

General Expression.

- 77. Behaviour generally free and spontaneous
- 78. Usually cheerful, laughed and smiled
- 80. Was stable from day to day, constant in mood
- x83. Did not complain much of discomfort
- 86. Chattered spontaneously

Score

- Behaviour often inhibited
- Usually solemn, seldom smiled or laughed
- Was variable in mood, irritable, sad, excitable
- Complained often of discomfort
- Did not chatter spontaneously

Results of a Year's Application of the Tentative Scale.

In the following paragraphs are mentioned some of the results of a year's application of the scale in the McGill Nursery School. The children were scored seven times, in January, February, April, May, November and December, 1927, and in February 1928. During that time sixteen children left the school, and sixteen new ones were admitted. Thirty-six children altogether were studied, but very few of them were scored more than five times.

Table I gives the average percentage scores on the social and emotional parts separately, and on the complete scale, for the two school groups A and B, and for the whole school together. It will be noticed from this table that the scores on the emotional part are uniformly higher than those on the social part; also that an increase in score with age is shown on both parts of the scale. The children in the older group scored higher than the children in the younger group.

TABLE I

GROUP AVERAGE PERCENTAGE SCORES ON THE TENTATIVE SCALE

	Group A.	Group B.	Whole School.
Social Development . . .	65	76	72
Emotional Development . . .	77	84	81
Complete Scale . . .	71	80	76

TABLE II

AVERAGE PERCENTAGE SCORES ACCORDING TO AGE

	2-6 to 2-11 years.	3 to 3-5 years	3-6 to 3-11 years.	4 to 4-5 years.	4-6 to 4-11 years.
Social Development . . .	57	70	70	80	82
Emotional Development . . .	74	76	77	83	86
Complete Scale . . .	66	73	74	82	84

A finer gradation of the scores according to age is given in Table II. Here the average scores of the children in half-year age groups are presented. These results show that in actual practice the scale indicated stages in the development of the children's behaviour. The average scores of children who had attended school for different periods, regardless of age, also showed progress. The children who had attended school from one to six months scored on an average 73 per cent., while those who had attended six to twelve months

scored on an average 80 per cent. The majority of the children who had been in school longer were older than the others. Age is therefore also a factor in these scores.

The practical value of the scale as an indicator of development in social and emotional behaviour was further demonstrated by the results on each application or scoring of the scale. The first time the scale was marked the average score for all children was seventy-four. The second time the scale was marked the average score was seventy-six. The third time the average score was seventy-eight; the fourth time the score was eighty, and the fifth time the score was eighty-one. These average scores, of course, are only composite results, and an examination of scores of individual children would show that there was by no means always a gradual increase in score with time. Some children would score higher the first time than the second, or higher the fourth time than the fifth. Nevertheless, the results show that the children on the whole improved their scores on the scale with time.

A comparison of the average scores on the complete scale with intelligence as indicated by tests gave some interesting results. The average score gained by each child on the successive ratings was first found. These scores were compared first with I.Q. on the Stanford-Binet tests, and secondly with median percentile scores on the Stutsman performance tests. If a child had been tested more than once during the year the average I.Q. or performance score was taken for that child. The coefficient of correlation, by the rank difference method, of Social-emotional Development score with Stanford-Binet I.Q. was $+0.45$, while the coefficient of correlation with Stutsman performance score was $+0.23$.

These coefficients of course are unreliable on account of the small number of cases; but if they are at all significant they indicate some slight correlation between social-emotional development, as shown by the scale, and intelligence as measured by tests. This means that there must have been factors in common between the intelligence test situation and criteria for scores on the scale. Although an attempt was made to eliminate from the scale descriptions of behaviour determined largely by linguistic and other intellectual development, nevertheless a number of such items remained. The fact that the correlation coefficients are so low indicates, however, that the Social-emotional Scale measured something

different from what was measured by the intelligence tests. Results obtained on the scale, therefore, add something to our knowledge of the child's development as a whole.

The higher correlation between the Social-emotional scores and Stanford-Binet I.Q. as compared with their correlation with Stutsman performance scores illustrated a point the writer has mentioned in previous articles with regard to the mental test situation.¹ Many of the Binet tests are not intrinsically interesting to the young child, and the question and answer method frequently employed makes the child more attentive to the social situation between himself and the examiner than to the matter in hand. The situation is essentially one which calls for social and emotional adjustment as well as ability to answer the particular test question. Other writers have made this observation, and Doctors Levy, Tulchin and Goodenough have used the test situation alone as a setting for the study of emotional behaviour. The performance tests, however, are more in line with the pre-school child's interests, and he can work at them more independently of the adult watching him. They arouse less social or emotional conflict such as negativism, so common at the three-year level, than do the Binet tests. These facts may account for the lower correlation with Social-emotional Development scores.

In addition to the above composite results on the complete scale, the number of (1) marks, the number of (0) marks, and the number of (—) marks placed against each separate item were also found. This was done with a view to finding the suitability of each item for the scale. For instance, if an item was invariably scored (—) it was probably not worth keeping in the scale, as the behaviour it represented occurred too infrequently to be worthy of consideration. Similarly if an item was invariably marked (1) or (0) it was not discriminating enough. The detailed results of the above calculation are not given here as they would take up considerable space to little advantage. Suffice it to say that several unsuitable items were picked out by this means, and these were omitted or changed when the scales were modified later.

A casual observation of the results on the separate items showed that in a number of the items the younger children all scored (1) while several older children scored (0). These items, therefore, could not be of developmental significance. A

¹ See Bibliography.

closely examination of these items revealed the fact that some of them applied to undesirable behaviour which the young child had not yet learned. They were thus only of use in discriminating stages of development in the older children. For instance, the item "did not ask thoughtless questions to gain attention" obviously can only apply to the child who is old enough to ask questions. The younger children scored (1) for this item because they had not reached this stage of linguistic and intellectual development, and not because they showed more social control of their assertive tendencies.

It seemed desirable, therefore, to find out which were the items wherein the younger children scored more than the older ones, in order that they might be removed or made into a separate scale for use only with older children. Further, if such a separate scale were to be made, it would be necessary to delimit the ages for its application. The most suitable lower age limit could best be ascertained by finding from the foregoing results the age at which the change in intellectual or other development was most noticeable. For these two purposes the numbers of (1), (0) and (—) marks were totalled for each item for different age groups. First, they were totalled for children between the ages of two and a half and three and a half, and between three and a half and five years of age. These groups corresponded to the school groups. Secondly, the scores were totalled for the age groups three to four and four to five years. In the one case the age division was at three and a half years, and in the other at four years.

A study of both of the above sets of results showed that only thirty-five of the items indicated no age difference—that is, there were as many (1) and (0) scores in the younger as in the older age groups. There were forty-nine items which were distinctly of significance from the point of view of development. In these items the older children scored more (1) or fewer (0) marks than did the younger ones. There were on the other hand fifty-seven items, twenty-one social and thirty-six emotional, on which the younger children scored fewer (0) marks than did the older ones.

These fifty-seven items were examined carefully and individual scores were studied. It was found that in the emotional part of the scale many of the items occurred in the "Anger" section, and that the (0) scores were mostly gained by a few obstreperous and easily angered children in the older

school group, B. Others of the fifty-seven items apparently were not applicable to the younger children since the babies all automatically scored (1) against them. Twenty-three of the items were selected for use only with older children in the improved scales. These items are marked X in the sample of the scale given on pages 14 to 17.

An examination of the items on which older children scored more (o) marks than younger children, with regard to the above-mentioned age divisions, revealed some interesting facts. It was noticed that on twenty-three items more (o) marks were gained by *older* children than by the younger children when the age division was three and a half years, whereas on these same items more (o) marks were gained by the *younger* than the older children when the age division was at four years. This means that most of the (o) scores were gained by children between three and a half and four years of age. Some of these were the particular problem children already mentioned. Further explanation may be found in the fact that these children are the younger ones in their school group B. Such a situation might arouse anti-social impulses and emotional conflicts which would not be present were the children the older ones in the group, as are children of three to three and a half years in Group A.

A further comparison of the marks on the separate items for the two age groupings showed that the age division at three and a half years was superior to the division at four years from the point of view of dividing off stages of development. In eighty-three of the total hundred and forty-six items a greater difference was shown between the scores of older and younger children when the dividing line was at three and a half than when it was at four years. On the other hand, only in twelve instances was a greater difference shown between older and younger children's scores when the dividing age was four years as against three and a half.

These figures may indicate that there is a period of marked development between three and four, and that the natural age division of pre-school children is at three and a half years rather than at three or at four years of age. On the other hand, these results may have been due chiefly to the fact that the school was already divided into two age groups, one for those above and one for those below three and a half years. Consequently the behaviour items in the scale may have been

selected so as to emphasize this division between stages of development. Also, the scorer's judgment when marking the children may have been influenced by the school grouping and so determined the trend of the scores. It is fairly common in nursery schools to divide children into groups above and below three and a half years of age, and so it was decided to adopt this age division in future modification of the scale.

Continued use of the scale and further observation of behaviour made increasingly apparent the need for re-classification of the items, and revision of theories with regard to emotional behaviour. For example, many of the items at first loosely classified under the general heading "Feelings" were seen to belong under more definite headings such as Tears, Fear or Anger. The behaviour involved was merely less exaggerated or milder forms of angry or tearful behaviour. Some of the items obviously belonged to the social rather than to the emotional part of the scale. Other items classed as "feelings" represented behaviour distinctly emotional in nature and suggested the creation of an additional subdivision for "excitement". In the same way items under the heading of "General Expression" were seen to fit satisfactorily under other more definite headings. Further discussion of this subject of classification of emotional behaviour will be found in the next chapter.

SUMMARY OF RESULTS AND CONCLUSIONS

After the scale had been used seven times during the period of a year in the McGill University Nursery School, results showed that it was measuring both social and emotional development in the children, though no doubt only approximately. A definite increase in score on the scale with age and with length of school attendance was shown. A small positive correlation was found to exist between scores on the scale and intelligence test results. Although many faults were found in the scale the first results were sufficiently encouraging to make it seem worth while to continue work upon it. Some of the weak points in the scale and suggestions for improvement are mentioned below.

The wording of many of the items was too vague and too dependent upon adult interpretation. For instance "showed annoyance when reprimanded" allows considerable scope for the judgment of the observer to decide what is "showing

annoyance" and what is not. Different observers would probably decide differently with regard to the same behaviour. The number of items in which the terms "frequently", "usually", "seldom", etc., occur might be reduced for the same reason. These items are difficult to score and are subject to the influence of individual idiosyncrasies of raters.

Some items were difficult to score because many different kinds of behaviour were referred to in the same item. For instance, "has hit, pushed, or fought in self-assertion" really refers to three different kinds or stages of behaviour. Children often push one another, but it is less common for them to hit, and still rarer for them to fight in mere self-assertion when they are not provoked. Moreover, in time single hits become substituted for fighting, and pushing often takes the place of hitting. It is therefore poor measurement of development to score all these forms of behaviour as if they were one. Compound items of this kind were made in the beginning with a view to keeping the scale as short and concise as possible. Actual experience, however, showed that this was false economy and only complicated scoring and made the scale less reliable. Since so much thinking and deciding was required for compound items, it soon became apparent that a longer scale of definite, isolated behaviour items would be quicker and easier to score.

The arrangement of the items into two columns, those representing more developed behaviour on one side, and those representing less developed behaviour on the other, was found to be cumbersome and uneconomical. It involved much useless repetition of words and allowed very little space on the page for score marks. Most of the paired items referred to the positive or negative appearance of a single form of behaviour. It seemed desirable, therefore, to change the wording and arrangement of the items so that one-half of the page could be used for printing matter and the other for scoring. The items could be worded after the fashion, "the child has or has not done such and such a thing". In this way the same score sheet could be used for a whole year's scores instead of only for one or two months as previously. For greater simplicity in scoring, the numbers of items in each scale and in each sub-section might be brought to a round number. The least useful items could be omitted for this purpose.

Items in the emotional part of the scale might be re-classified

to make observation and scoring easier, and also to make it possible to give a clearer summary of a particular child's emotional make-up. A discussion of the suggested re-classification will be found in the next chapter. The items in each sub-section of both parts of the scale might also be arranged in order, so that those describing more developed forms of behaviour follow earlier exhibited and less developed forms. In the case of emotional behaviour this would mean usually that the more violent forms of emotional expression are mentioned first in the list, and milder forms lower down.

The foregoing results also pointed to the desirability of certain items being set apart for use only with children over three and a half years of age. These items were found in-applicable to children under that age, and they were so worded that the younger children invariably gained (1) marks rather than (0) marks for them. In order not to penalize the older children on this account, supplementary sections might be added. The younger children under three and a half years would not be scored on these items.

Continued observation of the social and emotional behaviour of the children brought to notice a number of different behaviour items which had not been included in the scale. Some of these when added to the scale would probably increase its usefulness and reliability. The two parts of the scale might also be made into two separate scales for practical convenience, one for Social Development and the other for Emotional Development.

A thorough revision of the scale was made in the spring of 1928, and an attempt was made to improve it along the lines suggested in the foregoing paragraphs. A detailed description of the revised Development Scales and discussion of the changes made in them will be found in the following chapters.

CHAPTER III

THE REVISION OF THE SCALES

ALL the items in the tentative Social and Emotional Development Scale described in the last chapter were carefully considered in relation to the actual behaviour of the children. A number of the items were divided so that only one specific form of behaviour was described in each, instead of two or three alternative forms. Vague interpretative phrases were changed to concrete descriptions of actual performance or behaviour. As many as possible of the terms expressing relative frequency of behaviour were omitted without taking what seemed to be essential items from the scale. Several new items were added, since the length of the scale was now considered of less importance than the representation of many different kinds of social and emotional behaviour.

The actual form of the scale was also changed according to the suggestion made in the last chapter. This was done for economy in space and to reduce the amount of reading matter. The items were written in the form: "the child *has* or has not" done such and such a specific thing during the time of observation. Some of the items were expressed in the form: "the child has *not* or has" done such and such a thing, if the doing of the particular act was a less developed type of behaviour than not doing it. Thus the items were still arranged as opposite alternatives. The more developed kind of behaviour was expressed in the first alternative, and the less developed kind in the second alternative. The change of form resulted mainly in a saving in repetition of words. These items were printed down the left side of the page and the right side was used only for marking them. Six empty columns were left for six sets of scores. The same blanks could thus be used several times. Since the revised form was so much longer than the tentative Social-emotional scale, it was divided into two separate scales for greater ease in handling.

The original method of scoring was maintained. That is, the examiner marks a (1) against each item if the first alternative, and a (0) if the second alternative applies. A (—) is marked in cases of doubt, or when no observation concerning the item has been made. These items are omitted from the final percentage scores. The number of items in the scales and in each sub-section were brought to a round number by eliminating the least essential ones, in order that scoring might be simplified.

Groups of items in several of the sections were put into separate lists for use only with children over three and a half years of age. Those under three and a half years are scored only on the parts of the scales marked A. Children over that age are marked on both A and B parts which include these supplementary items. The final scores for the younger children are percentage scores of A items, and the final scores of the older children are percentages of A and B items.

The classification of the items of social behaviour was not changed. But the items were arranged in each sub-section roughly in order, so that the less developed forms of social behaviour came at the top of the lists and the more developed forms of behaviour were placed lower down. In some cases groups of items were placed together because they referred to similar situations. Some, on the other hand, were separated to avoid confusion in marking. At first it was thought that additional sub-sections might be made for items referring to behaviour in relation to single children or adults, and to behaviour with regard to groups of children or adults. This was not done because it was found impossible always to make this distinction. The children were generally in such close proximity. It was noticed, however, that a new child usually played with a particular child at first before joining a group. Allowance was made for this observation in the scale.

The five sub-sections of the Emotional Development Scale were changed somewhat, both as to title and content. Also another section was added as a result of further consideration of the nature of emotional behaviour. The items in these sections, as in the Social Scale, were arranged roughly so that the less developed forms or the more violent expressions of emotion appeared at the top of the lists, and the more developed or milder forms of emotional behaviour came further down.

It was quite impossible to make an exact gradation of items

in either scale because there was no invariable sequence noticeable in the children's behaviour. There was, however, enough uniformity in order of appearance of certain kinds of behaviour to allow for a very general or rough order in the lists of items. It often happened that a child who had done what was generally speaking the more developed thing one day would do the less developed thing another day. For instance, a child might speak gently to an offender one day, and hit him or push him away the next, or even later the same day.

A comparison of the observational records concerning expressions of likes and dislikes and general feelings, with those concerning expressions of anger and fear, led the writer to regard "the feelings" as being essential items in a scale for emotional development. The behaviour records showed that as much general upset and characteristic emotional response might occur in connection with any extreme dislike as in a distinct anger-producing situation. Crying was found to be a general emotional outlet and might accompany any kind of emotion, fear, anger, or even excitement. Similarly laughter and joyous responses were found attached to all kinds of emotion-producing situations including sudden disturbances or loud noises.

It was decided to omit the general heading "Feeling" and to make two sub-sections of the scale to include apparent expressions of pleasure and displeasure. These are usually regarded as feelings, but marked pleasure and displeasure objectively show all the characteristics of emotion. The items in one of these sections include expressions of displeasure ranging from crying and weeping to milder complaints of discomfort. The other section contains items expressing pleasure, ranging from laughter and frolicking to less actively expressed interests and affections. The former sub-section was called "Distress and Tears" and the latter "Delight and Affection". The term "affection" as used here means fondness, tenderness, or liking for persons. It is affection in the layman's sense of the word, and includes McDougall's "tender emotion". It does not mean affection in the broad sense of the term as distinguished from conation and cognition in the older psychologies.

The sub-section "Fear" in the tentative scale was kept in

Caution". This was done so as to include all the milder forms of timid or fearful behaviour which are not violent emotional reactions like those described by Watson. In the same way the heading of the sub-section "Anger" was changed to "Anger and Annoyance" so as to include the less violent responses of annoyance and irritation.

Enuresis, though in some cases obviously only due to poor training, was found in a number of instances at school to be a reaction to an exciting or stimulating situation. It occurred often in children who were of a distinctly emotional or excitable nature. It seemed, therefore, as if enuresis had almost as much right to be included in the scale as tears. Other evidences of excitement pointed to the desirability of another section being added to the scale. Excited behaviour appeared to be as much emotional in nature as anger or fear, since it involved circulatory changes, muscle tension, interference with digestion, and violent motor reactions. As enuresis and excitement seemed to be more or less connected, it was decided, therefore, to add one more section to include both these kinds of behaviour under the heading "Excitement and Enuresis".

Some of the items of the original sub-section "General Expression" were kept in the new scale, but the heading was changed to "Mannerisms and Speech Anomalies". This group of items included nervous tics and mannerisms which seemed to be emotional in origin or accompaniments of other emotional expressions. Slight abnormalities of speech were included in this section, since studies of particular cases seemed to show that the persistence of these abnormalities was most often due to emotional causes.

Thus the six sub-sections of the new emotional development scale are: Distress and Tears, Fear and Caution, Anger and Annoyance, Delight and Affection, Excitement and Enuresis, and Mannerisms and Speech Anomalies. It must be understood that these do not represent a new psychological classification of the emotions. They are only practical divisions of emotional and feelingful behaviour and contain much overlapping.

One of the underlying ideas which partly determined this classification was the thought of making some sort of grouping of behaviour which might correspond to the psychiatrists' types of mental disorder, or the psychologists' categories of temperament. The Distress section contains behaviour ex-

pressing misery and depression similar to that of the depressed or persecuted patient. The Fear section contains behaviour similar to that of the patient who has anxiety or phobias. The Anger section represents the choleric type of behaviour which is often apparent in several kinds of mental disorder. The Delight section includes behaviour of a sanguine nature, while both the Delight and the Excitement sections include some aspects of manic behaviour. The Mannerism section includes nervous tics, automatisms and stereotypies. One of the hopes of the writer was that the scale might prove useful as an indicator of certain emotional trends as a guide for educational and therapeutic measures for the mental welfare of young children.

Certain difficulties in the making of observations and in scoring them on the scales were encountered during the trial tests of the tentative scale. It was found very difficult to note all the little changes and aspects of behaviour of twenty different children that were required to be marked on the scales. This came surprisingly easier with steady practice. If not too much was attempted at a time, and the little attempted was done with thoroughness, skill in observing grew rapidly. In the same way marking the scales was found to be slow and tedious at first. However, practice and increased familiarity with the scales was found to reduce the time required for marking one child on both scales to about half an hour.

As a result of this experience the writer has drawn up a form of directions and suggestions with regard to suitable methods of observing and scoring the scales to be a guide for other observers. These directions are presented immediately below. They were followed in observing and scoring the McGill Nursery School children. The scales themselves are presented in Chapters IV and VIII.

DIRECTIONS FOR USE OF THE SCALES

Number of Children to be Rated.

Since there are so many facts of behaviour to be observed, it would probably be advisable when first using the scales to select only two or three children to be rated. This number may be increased to ten or twenty as skill in observing behaviour and familiarity with the scales develop. It is

be observed for approximately equal lengths of time. Care should be taken when observing a number of children at once to guard against one child taking the whole of the observer's attention. The effect is then the same as if the other children had not been under observation.

Observation Periods.

The children to be rated should be observed by the examiner daily for about a month during school hours. The observation periods should preferably be three hours a day or more, but certainly not less than one hour a day. Observation should take place at different times during the school day, so that the children's behaviour may be seen under varying conditions. The gradual changes in development of the children may be seen if they are observed and scored on the scales every month, or every alternate month, during the school year.

It is suggested that the examiner read through the development scales several times so as to become familiar with the kind of behaviour to look for during observation. Notes should be made of the children's behaviour during observation as an aid to memory and to assure greater accuracy in rating. Inquiry may be made of other adults associated with the children in school concerning their behaviour at other times. Notes should be made of any such information, and the examiner should verify all statements with regard to the children's behaviour by personal observation whenever possible.

For the sake of greater reliability of scores it is essential that keen observation be made so as not to miss a single event which should be marked on the scales. Observed facts only should be considered and prejudices guarded against.

Marking the Scales.

Towards the end of the month the scales may be marked according to the children's behaviour. It is preferable to use a separate blank for each child. Children between the ages of two and three and a half years are scored only on parts of the scales marked A. Children between the ages of three and a half and five years are scored on both A and B parts of the scales.

Making constant reference to his or her notes on the child's behaviour, the examiner should mark after each item (1) if the first alternative and (0) if the second alternative applies to the child under consideration. If no observation has been

made with regard to a particular item, or if the answer is at all doubtful, (—) should be marked in pencil.

The space in parenthesis for specific instances following certain behaviour items may be filled in as indicated, for reference purposes. These are not taken into account in the scoring.

Checking Observations.

After the first tentative marking the examiner should observe the children again for a few days, paying special attention to evidences of behaviour marked (—) on the scales. Inquiries should be made of adults who are frequently with the children concerning these behaviour items. Again, statements of others should be verified whenever possible.

From this further information the examiner should then change as many of the (—) marks as possible into the appropriate mark (1) or (0). For comparative purposes it is desirable that not more than 10 per cent. of the items in each scale be left marked (—).

It will be noticed that sometimes a single event may be scored under two or more items according to different aspects. For example, a child may cry because he is hurt and at the same time because he has been teased. Where no decision can be made the event may be scored on both the applicable items. Whenever possible, however, it is desirable to decide on the most appropriate item and to avoid scoring the same event more than once.

It cannot be too much emphasized that care should be taken to avoid prejudices and to mark strictly in accordance with observations. Although in devising the scales considerable thought has been given to the important matter of making them as objective as possible, still the personal attitudes and the observational ability of the examiner may influence the scores to a marked degree. Some observers, for instance, tend to mark in favour of the child by placing (—) against all items where the answer is doubtful, though in all probability the correct mark should be (0). Others tend to mark in the opposite way by placing (—) against doubtful items where the probable mark would be (1).

It is thus desirable that the examiner inquire into his or her own tendencies and prejudices and guard against their influencing his or her observations or marks on the scales. And it is very important that all doubts with regard to the appro-

priate mark for any behaviour item be cleared up whenever possible, by checking against further observations before the marks are scored.

Scoring the Scales.

The total score for each section and for the complete scales is found by adding the (1) marks, allowing a point for each. For comparative purposes it is necessary to bring these scores to a percentage of the total number of items marked (1) or (0). Thus the final or percentage score for each *section* of the scales may be expressed as :

Total (1) scores in section multiplied by 100

No. items in section minus no. (—) scores in section.

The final or percentage score for each *complete scale* is :

Total (1) scores in scale multiplied by 100

No. items in scale minus no. (—) scores in scale.

PART II

SOCIAL DEVELOPMENT

CHAPTER IV

THE SOCIAL DEVELOPMENT SCALE

It must be understood from the outset that the scale is not really a scale in any exact sense of the term since the items or increments are of unequal value. For instance, a little consideration will show at once that failure to gain a point on item number fifteen, "pointed to other's errors," may be less a sign of social immaturity than is failure to gain a point on item number nine, "joined group of children in play". Composite behaviour items such as constitute the units of the scale could never be made of equal value. Moreover, in preliminary trials behaviour was found to vary only very generally with age, and numerous individual reactions to the same social situations were observed. Furthermore, there seemed to be certain types of reaction to particular situations which could not be evaluated one against the other. For example, an energetic, noisy child might cause disorder in a group, while a lethargic child might sit quietly in a group of children ignoring them almost entirely.

Although attempt was made to represent all types of social, non-social and anti-social behaviour in the scale, a close examination will show that there are more items of one kind than another. For instance, there are more items on which the obstreperous, impulsive child might lose points than ones on which the quiet, seclusive child might do so. This is undoubtedly a defect in the scale and probably due to the fact that anti-social behaviour is more readily noticeable than non-social behaviour. An effort to remedy defects of this kind brought no very satisfactory results. Behaviour types

among pre-school children could only be defined in such general terms, and there was found to be so much overlapping in the behaviour of apparent types, that it was decided to leave the items as they stand for the present.

In addition to the fact that the items are of unequal value there are many other factors which render the scale of little significance from a purely quantitative point of view. Both social and emotional behaviour are reactions to particular situations and changing environmental conditions. These conditions will differ greatly from school to school, and from time to time in the same school. Children's scores cannot therefore be compared fairly with those of other children in different schools, or even with their own scores at a later or earlier date.

Furthermore, the observational ability of different examiners varies enormously ; one will miss what another will see in the same situation. Also the same examiner may vary in shrewdness of observation from day to day, depending upon distractions, mood, health, and other factors. When several children are observed at the same time one may receive more attention than the others, so that in spite of efforts to observe each child for the same length of time, some children will be longer under observation than others. All these facts tend to make the numerical scores unreliable. But, although the scales may not be considered as exact measuring devices for comparing individuals and groups of children in different communities, they still have some slight value for quantitative studies. Preliminary experiments have shown that with the aid of scores obtained on the scales, rough comparisons at least can be drawn between children in small groups observed at the same time by one observer.

The chief merit of the scales, both social and emotional, lies in the assistance they offer for the *qualitative* study and analysis of children's social and emotional development. With the help of the scales certain behaviour trends may be brought to light and subsequently given special educational treatment. Rough comparisons may also be made between children of the same group both with regard to general development and the persistence or changes of certain specific trends. Further, parents, teachers, and psychologists will find the scales particularly helpful as a means of training their own powers of observation. Consideration of results will also give

them greater insight into the social and emotional significance of small aspects of children's behaviour which would ordinarily pass unnoticed.

The Social Development Scale is presented immediately below. The twenty-five items marked with an asterisk are those which were found to be most significant from the point of view of development when the scale was applied in the McGill Nursery School. Further discussion concerning these items will be found in Chapter XVI.

SOCIAL DEVELOPMENT

SECTION I. RELATIONS WITH CHILDREN

Part A (Age 2 to 5 years)

The Child HAS or has not :—

1. Played with another child
2. Spoken to another child
3. Occasionally made social contact by touching or pushing a child
4. Imitated other children's actions
5. Imitated children's words
6. Imitated children's laughter
- * 7. Often spoken to other children
- * 8. Originated new play activity with another child
- * 9. Joined group of children in play
- * 10. Sought another child's approval
- * 11. Asked another child for help
- * 12. Always given up toys at fair request
13. Usually waited turn
14. Tried to defend own right to materials or place
- * 15. Pointed to others' errors
- * 16. Tried to help others
- * 17. Stopped work to aid another child
- * 18. Comforted another in distress

The Child has NOT or has :—

19. Turned away to avoid another child's friendly advances
- * 20. Usually stayed out of group marching or games
- * 21. Claimed others' toys
- * 22. Interfered with others' work
23. Destroyed others' work
- * 24. Created disorder in group or led others into mischief
- * 25. Frequently pulled or pushed others
26. Frequently complained of others to adult for own gain

27. Harassed new child by scoffing or shunning
28. Hit or pinched others for fun several times
29. Bitten or spit at others for fun
30. Teased in other ways causing irritation or discomfort:—
(e.g. . . .)

Part B. (Supplement to A. Age 3½ to 5 years)

The Child HAS or has not:—

31. Offered to share materials with others
32. Willingly shared own toys or candy brought to school
33. Fetched toy to give another child
34. Voluntarily passed things to others at table
35. Defended rights of smaller children
36. Initiated group activities
37. Tried to make a new child one of the group
38. Spoken appreciatively of another child
39. Made appreciative remarks about another child's work
40. Repeated a child's remarks with or without original modification
41. Tried to correct others without appeal to adults
42. Spoken gently to offender when interfered with
43. Apologized to child for accident or mistake

The Child has NOT or has:—

44. Pulled roughly at own material removed by another child
45. Punched and fought smaller children
46. Made taunting remarks about another child
47. Frequently commanded or regulated others
48. Pressed services on smaller children against their will
49. Usually played alone outdoors
50. Been scolded or avoided by the group

SECTION II. RELATIONS WITH ADULTS

Part A. (Age 2 to 5 years)

The Child HAS or has not:—

- *1. Often spoken to adults
2. Usually co-operated in school routine
3. Asserted own rights against adult commands
4. Sought adult approval
5. Been willing to be helped
- *6. Asked help when needed
7. Tried to help self when unassisted
- *8. Always found occupation for self
- *9. Usually put away materials before taking out more

The Child has NOT or has :—

11. Held aloof from adult
- *12. Frequently refused to do what adult asked
13. Frequently disobeyed commands
- *14. Usually resisted adult suggestions
- *15. Persistently refused to eat dinner
16. Ignored adult disapproval
17. Often gone to adult to be petted
18. Usually waited to be shown how to use materials
- *19. Sought help by passively waiting
20. Depended entirely on help in undressing
- *21. Waited to be fed at table
22. Depended entirely on help at the toilet
23. Deliberately destroyed materials
24. Sought others' place for adult attention
25. Frequently followed adult about for attention

Part B. (Supplement to A. Age 3½ to 5 years)

The Child HAS or has not :—

26. Related own good actions to adult
27. Carried on school routine in adult's absence

The Child has NOT or has :—

28. Done forbidden things in adult's absence
29. Invented excuses for errors and omissions
30. Tried to hide deeds from adults
31. Made abusive remarks to adults
32. Refused to try to undress or dress self when unassisted
33. Constantly sought adult's attention
34. Appealed continually for praise and approval
35. Told untruths to impress or influence adult

Examination of the items in the Social Development Scale will show that certain ones belong more or less together, they indicate much the same kind of behaviour. These items have not always been placed together in the scale because they may represent different stages in development of the same thing, or the behaviour which they describe may occur in different settings. Also, when two things are nearly alike and yet have an important difference it is often confusing to consider them in immediate succession. Items which indicate development along more or less the same lines are mentioned below to help the examiner pick out specific trends of development, of precocity, backwardness, or anti-social behaviour in any particular child. Different combinations may, however, be

considered for different purposes; and no doubt other examiners would see elements in common in different groups of items. The following combinations of items are only given by way of suggestion. As will be readily observed, there is much overlapping. The same behaviour may be determined in several ways, and the same trend may show itself in several forms of behaviour.

In Section I, relations with other children, the following items refer to the development and control of active aggression and self-assertion: numbers 3, 25, 27, 28, 29, 30, 44, 45, 47 and 48. Closely akin to these are, 21, 22, 23 and 24, which refer to the control of the tendency to interfere with others and dominate by creating a disturbance. The following items show the development of sociability and co-operation, 1, 8, 9, 10, 12, 13, 19, 20, 36, 37, 49 and 50. Those which indicate helpfulness and kind consideration for others are, 16, 17, 18, 31, 32, 33 and 34. The items which indicate a child's social development through language are, 2, 4, 5, 6, 7, 11, 26, 38, 39, 40, 41, 42, 43 and 46. Item number 14 shows attempt at self-defence, a sign of growing independence and a part of social development.

In Section II, relations with adults, the control of assertive tendencies may be seen from the scores on items 5, 12, 13, 14, 15, 16, 23, 24, 25, 28, 32 and 33. Co-operation and sociability are shown in 2, 4, 9, 11, 17, 27 and 34. Social development expressed in language may be seen in 1, 6, 10, 26, 31 and 35. Development of self-reliance and independence is shown in 7, 8, 18, 19, 20, 21 and 22. The presence or absence of deceptiveness is indicated in items 29, 30 and 35. The stages of development or control of the above traits are indicated always by positive scores. These are obtained in some instances by behaving socially and in others by avoiding anti-social behaviour.

The items in each sub-section of the scale besides being divided into A and B groups for younger and older children, are further divided into lists of positive and negative social behaviour. In the one case, the child gains a point if he *has done* whatever is described in the item, and in the other case, he gains a point only if he *has not done* what is stated in the item. The latter negative items consist of statements of non-social or anti-social behaviour. It was found necessary to include these because observation of the children showed

plainly that social development consists in learning to refrain from anti-social behaviour in addition to acquiring more and more sociable habits.

Unfortunately the arrangement of items thus into groups of positive and negative statements makes the marking of them somewhat confusing. It is suggested that the examiner mentally repeat the word "not" before each item when marking the groups of non-social statements, and then errors will be less likely to occur. Practice soon eliminates the tendency to confusion. If the items were all arranged in positive statements the method of marking could not be kept uniform. A change in the system of marking would involve greater complication both in marking and in scoring than the present arrangement.

CHAPTER V

SOCIAL RELATIONS WITH CHILDREN

IN this and the following chapter each item in the Social Development Scale is considered in detail. Examples of the actual behaviour of nursery school children are given, together with a few snap-shot illustrations. The masculine pronoun is used throughout, but the descriptions of behaviour apply to girls as well as to boys. The items referring to non-social or anti-social behaviour in these chapters are prefixed by the word "not". Thus the scoring in every instance would be a point if the statement is true for the child under consideration, and zero or no score if the statement is not true of his behaviour. The scoring of various examples of behaviour is given for each item for the purpose of greater clarity.

SOCIAL DEVELOPMENT SCALE, SECTION I

Part A (Age 2 to 5 Years)

1. Played with another child.

Before children reach the stage of playing together in a group they usually single out some particular child to sit beside or play with. Often the first kind of social play noticeable in pre-school children is really only individual play side by side. If the children work with their own material without reference to each other or to the occupation of the other, this cannot be called social play. But if one child leans over to join in the other's occupation or asks the other to join in his, that is social play, and would score a point on this item. Actual co-operation with another child in a game of "tea-party" or "families" or in block building would also score a point. This is usually a little later stage in development than the former, but it appears before group play. See Figures 1, 4 and 5 for illustrative examples of this behaviour.

2. *Spoken to another child.*

New-comers in the nursery school will often speak more readily to an adult than to a child, especially if they have not played much with children before. How they speak and how much, will depend in part upon their age and their language development. Any attempt to speak to another child, however, may be counted in this item. It may be mere babble, a word or two referring to the child's own doings, a command, a sentence of information, or a request. So long as it is directed towards a child it scores a point on this item. See Figure 2.

3. *Occasionally made social contact by touching or pushing a child.*

This is a difficult item to score, but one of important significance in the social development of the new-comer to the group. Many children when they enter the nursery school show indifference to the others at first. They go about their own affairs ignoring the other children, although they may stand or sit close by an adult and look for attention. They watch the movements of the other children in an aloof sort of way. After a few days they begin to study them more intently. About this time or even a week or two later, they react to the others in an experimental or explorative way.

These reactions are of various kinds. Usually they take the form of touching, patting, stroking, hitting, pushing, or throwing sand at another child. The young experimenter then watches the effect with great interest and often laughs at the results of his activity, even though they be violent protests and crying on the part of the other child. Gradually the novelty of the situation wears off and he makes fewer social explorations of this kind. He also learns to refrain from such violent expressions of interest as hitting, pushing, or throwing sand, partly because of adult reproof, and partly because the offended child usually retaliates in some way not too pleasant. A further stage in social development is shown when a child holds another by the hand, puts an arm around him, pulls him along on the sleigh or waggon, and so forth. See Figures 3 and 4 for illustration.

Apparently, aggressive behaviour on the part of a new-comer to a group of pre-school children is really a definite

stage in social development, and is usually followed by obviously sociable behaviour. The child who does not make such active and bodily contacts on coming into a group may be more socially advanced, but in all probability he is still unsocial, egoistic and indifferent to the group, and may be slow in social development. A child who reacts to the social situation in any of the active ways mentioned in the previous paragraph, such as by hitting, pushing, or stroking, scores a point on this item. Pulling a child's hair, hugging him or knocking him over may also be manifestations of the same thing, and should likewise score a point.

4. *Imitated other children's actions.*

When children first come to school they merely watch others passively and go their own way. Later, while watching another child or a group of children carrying out some action, they will imitate the movements. This is not necessarily conscious copying of the others, but is more probably semi-conscious imitation akin to the sympathetic movements of an interested spectator at a dramatic performance. Both attentive copying and automatic imitation of the movements of another child, or of several children, score a point on this item. It would be quite impossible for external observers to know whether a child is consciously copying a movement or not, although they may think they can make such a distinction. Examples of imitation are seen when a child copies the actions of others in such singing games as "Here we go Lubin-Loo" and "This is the way we wash our hands", or when he jumps off the bottom step of the stairs after another child. See Figure 5 for further illustration.

5. *Imitated children's words.*

When children begin to get adjusted to the social situation at school, they not only mimic each other's actions but also each other's words. These words may be somewhat inarticulate or clearly spoken according to the language development of the children concerned. Imitation of babble, of single words, or of sentences may score a point on this item, since it is the social rather than the language development that is being measured here. A point is allowed whether the child is looking at the one he is imitating, or whether he automatically repeats the other's words without looking up from his

6. *Imitated children's laughter.*

Most children are rather solemn during their first week at school, though some laugh cheerfully from the beginning. One of their first expressions of joy is often a reflection of the delight of another child. Mere smiling does not count for this item, as this still implies a certain amount of reserve. Laughter alone scores a point on this item.

7. *Often spoken to other children.*

Very generally speaking, the more children talk to each other the more sociable they are and the better adapted socially. There are, however, individual differences which make this statement only approximately true. Some children are more talkative than others, and yet they may not be so well adjusted to the social situation in other ways. Certainly, frequent remarks to other children represent a later stage in development than only a single remark addressed to another. Language development is in part responsible for greater frequency in talking, but this may be mere thinking aloud or an accompaniment of action without any reference to the hearers. Only social speech—that is, remarks directed to another child and repeated perhaps if there is no response—is to be considered in this item. The ambiguous term “often” can be taken to mean about three or four separate remarks a day in this case.

8. *Originated new play activity with another child.*

Children at first play independently at school, sometimes inventing activities and games for themselves to carry out. As they become more socialized they usually try to get another child to join them, and later still they try to organize a group game. The word “new” in this item means new only for the particular child, and not obvious imitation of an activity going on perhaps in another part of the room at the time. For instance, a child may take the toy dishes out of the cupboard and invite another child to join with him in a tea-party. This is a very common occurrence in the nursery school, but it may be a new departure for the particular child concerned. In that case such behaviour would score a point. (See Figures 4 and 5.) Getting another child to join in a jumping match or other activity would also score on this item.

9. *Joined group of children in play.*

Not all children are good at inventing games or new activities, and those who are not clever in this way may show their sociability by joining with another child or a group of children. If the particular child under consideration has joined a group of children playing house, kicking a ball, playing trains or other games, he scores a point for this item. See Figures 4, 6, and 19 for illustrative examples. It has been noticed that nursery school children at first play together only in romping games, and later, at about three or three and a half years of age, they co-operate in dramatic play.

10. *Sought another child's approval.*

When the approval and disapproval of other children become a matter of concern for a child, he is already developing a social attitude. One of the first ways of showing this concern is to exhibit some achievement for another child's approval. For instance, a youngster may hold up a roll he has made out of plasticine saying, "Look, John, look what I made." Another may seek general approval, saying, "You like me, don't you, John?" In either instance a point would be scored for the item.

11. *Asked another child for help.*

Children will ask an adult for help long before they will ask another child. It seems to be part of their social development to discover that other children can do things which might help them. If a child has gone up to another holding out a shoe to be buttoned, or has called to another child to lift the end of the table he was trying to move, or has asked for other kinds of help, he should be given a mark for this item. See Figure 7 for an illustration.

12. *Always given up toys at fair request.*

It is well known that young children claim or hold on to everything that appeals to their interest of the moment. When children first come to the nursery school they claim one toy after another whether a child is playing with it or not. Both the other children and the adult in charge impress upon the child immediately and repeatedly, that he has no claim to a toy another child is playing with, but that he can take anything else he likes from the cupboard. At first he will continue to claim the desired materials even though another

blows from the child in possession, in addition to reproof from an adult, he learns to respect the rights of others. He may not at first refrain from taking others' toys, but he will probably give them back when asked to do so. The latter behaviour would score a point on this item.

13. *Usually waited turn.*

Children who have been the first and foremost consideration in a household usually find it difficult to take their turn for things at school. A child who does not wait his turn to have his overshoes taken off, or to be called for dinner, but who repeatedly asks for special attention out of turn, would not score a point for this item. If, with very few exceptions, a child waits his turn to be undressed in the cloakroom, waits to be called for washroom duties, waits to tell his "news", or to go to the dinner-table, he is given a point for such behaviour. The term "usually" was put in here because no child under four was observed to wait his turn on all occasions.

14. *Tried to defend own right to materials or place.*

Some children when they first come into the school seem to be dazed by the new surroundings and the numbers of people about them. Such children usually only stare when another child claims the toy they were playing with; they make little attempt to keep possession of it. They act like passive infants, and only later when they become more adjusted to the situation do they hold on to their toys or push the interfering child away. Any attempt to hold on to a seat or materials scores a point here, no matter how feeble or rough the attempt may be. See illustration in Figure 8. Rough behaviour is considered in another item. Mere calling to an adult for aid is not sufficient to score a point, as this is another form of infantile, dependent behaviour.

15. *Pointed to others' errors.*

Part of social development is learning to distinguish between right and wrong conduct—that is, socially approved and disapproved behaviour. A child first learns what to do and what not to do himself, and as he begins to take more notice of the behaviour of other children he also learns to recognize their good and bad behaviour. Errors, mistakes, and bad conduct seem to be recognized first. It is much later that a child points to, or comments upon, another child's success

or good behaviour. The mere pointing towards and the drawing of others' attention to a child's mistake or bad conduct scores on this item. A remark or complaint about another child's bad behaviour also scores a point.

The remark may only be intended to show recognition of an error and to have it corrected with no thought of personal comparison, but it may imply also an element of smug self-satisfaction on the part of the righteous complainer. The former is obviously the more socially desirable kind of response, but no distinction is made for the purpose of scoring this item, and both types of remark would score a point. This item is intended to show the stage of recognition of others' errors only. The matter of complaint for self-glorification is considered in number twenty-six.

16. *Tried to help others.*

As the child's interest in other children develops it tends to express itself in attempts to do something for another. The child's social ego or self seems to expand to include the little playmates. After doing things for himself the next stage is to do something for another child and later for several other children. The little helpful actions most commonly observed in school are, helping a child to unbutton his coat, to take off pullovers and shoes, to find his right peg, to put up his napkin at table, to carry a table from one place to another, and so forth. Any one or more of such actions would gain a point for a child on this item. See Figure 9 for an illustration of helpful behaviour.

The actual nature of the helpful action will depend partly upon the child's stage of ability in performance. Children seldom try to help others do things they are quite unable to do themselves. A child usually tries to help others in things he is just learning to do and most interested in at the time. He practises and displays his new-found skill. For instance, the three-year-olds who are just learning to unbutton their coats are keener to undress each other than four-year-old children who can do this easily. The latter, however, are very ready to assist in moving heavy objects which they would not have been strong enough to lift a few months before.

17. *Stopped work to aid another child.*

This is usually a little later stage than item number sixteen.

and not interfering with his own work or plans. Later he may actually pause from his own work or occupation to help another child. Illustrations of such behaviour in the nursery school are seen when a child stops his block building to pick up another's pencil or beads which have fallen on the floor, and when a child puts down something he is carrying to fasten another's shoe or to fetch something for him. A point may be given for any behaviour of this kind. See Figure 10 for an actual example.

18. *Comforted another in distress.*

Some children seem to be much more sympathetic than others—that is, they appear moved or affected by another's distress. As a rule children make no attempt to express such sympathy at first, they only stare or perhaps cry in sympathetic imitation. Later when they are more socially adjusted they express their feelings by trying to comfort the child in trouble. This may take the form of an affectionate embrace or an arm put gently round the distressed child. It may take the form of comforting words as "Don't cry, I'll ask my mummy to get one for you", or it may take the form of simply asking "What are you crying for?" or "Does it hurt?" in gentle, kindly tones. Behaviour such as any of the above would score a point. See Figure 11 for illustration.

Care is needed, however, to distinguish between the kindly inquiry about the trouble and a question expressing only spurious curiosity involving no sympathetic concern in the child's distress. This distinction is shown usually in the tone of voice and the general behaviour accompanying the remark. A practised observer will find no difficulty in making the distinction.

19. *Not turned away to avoid another child's friendly advances.*

A new child, before he has become accustomed to the strangeness of the school situation and the people around him, may hold himself aloof and withdraw when a child approaches him in a friendly way. He may pull away his hand if a child offers to take him by the hand, or he may push away a child who tries to embrace him or kiss him. This kind of behaviour may persist in the case of certain self-sufficient children long after they have grown used to the school situation. If the child has not tried to avoid any friendly advances of another, such as those just mentioned, he gains

a point on this item. Struggling for release from an obviously uncomfortable clutch or hug should not cause the child to lose his point. Figure 12 shows a youngster avoiding another's friendly advances. The little girl to the left of the centre is trying to adjust the little one's napkin for her.

20. *Not usually stayed out of group marching or games.*

New-comers to the school do not as a rule join at once in group games or marching; they may, however, if they are over three and a half years of age. The two-year-olds usually stand by and watch or even try to crowd themselves into a corner or a cupboard away from the others. After several periods of watching the new child will join in, especially if encouraged by a friendly older child. He will be hesitant at first and may only stay for a few moments, returning at once to his corner. After this he will join with the others on occasion, but every now and then will prefer to stay out. When the child has reached the stage of usually joining in group marching or games organized by the teacher he gains a point for this item.

Even after a child is quite reconciled to joining in with a group he may prefer to sit alone on some occasions, as for instance when he feels tired or when the game is beyond his ability. This should not count against his score for social adjustment. The qualifying word "usually" is therefore added to this item so that a child may not be penalized in his social score merely for being tired or intellectually immature.

21. *Not claimed others' toys.*

The attention of pre-school children is readily aroused and distracted by new toys. When children first come to school many of the toys are new to them, and they usually want to examine them all in rapid succession, and even more than one at a time. When the novelty begins to wear off, familiarity and habit of action help to hold the child's interest in the play material. At first he has very little knowledge of property rights and very little practice in curbing his own desires at the request of or for the convenience of others. He claims any toy that attracts his attention for the moment. As has already been mentioned, he then learns slowly to leave alone what the other child is playing with and pay attention to his own toy. This learning process is encouraged by adult

adult and child reproof, and perhaps physical discomfort at the hands of another child. When he has learned his social lesson to the extent of not claiming other children's toys, he gains a point on this item. In Figure 13 a child is seen claiming another's broom.

22. *Not interfered with others' work.*

Children may interfere with others' work just by claiming their materials. But long after a child has learned not to claim another's toy, he may satisfy his interest in it by joining in with the other child, fitting cylinders into holes or matching colours, etc., for him. This behaviour may be the beginning of social play with another child, but it often appears while the child is still more interested in the material than in the one who is playing with it. It is really another step in learning about the rights of others. A child seems to learn first not to take another's toy away from him, and then not to interfere while he is playing with it. If the child has not thus interfered with another's work or play materials while still in use, he scores a point.

23. *Not destroyed others' work.*

Destruction of another child's work is a particular kind of interference. It may be the result of mere interest in the material and a desire to use it; it may also be just an accident. But more often it is a sudden expression of anger, self-assertion and envy. The child may be annoyed at not being able to use the coveted material, so he expresses his wrath by knocking down the bricks or scattering the material. The other child may be older and may be making some block construction, drawing, or plasticine model more elaborate than the younger child could make. Since the youngster cannot match the other's construction, drawing, or model, he asserts himself effectively by knocking down the blocks, scribbling on the drawing, or hitting the model. If a child has destroyed others' work more than once, either to use the materials himself, or from anger, or in self-assertion and envy, he fails to score on this item. Accidents should not be counted, such as when a child unexpectedly trips over another's blocks.

24. *Not created disorder in the group or led others into mischief.*

After a child has once discovered he can cause an effect in other children by one or another form of activity, he will repeat it for the thrill of power he gets out of it. For instance,

he may have found that other children will start to shout when he shouts, or to run up and down when he does, or to laugh and pull faces when he does. Such practice in leadership, suggestion and imitation, is good social exercise. It is good so long as it includes only desirable behaviour. It is not good practice when a child encourages others to do forbidden things, to splash water all over the floor, to shout and make noises when an adult has asked for quiet, to throw food about at table, and so forth. As soon as a child lets his delight in a sense of power cause him to ignore or forget his knowledge of approved or disapproved behaviour, he is not doing socially desirable things. If a child has led others into mischief or has caused distraction from work and noise and disturbance in the group, he fails to score on this item.

25. *Not frequently pulled or pushed others.*

When first observing the behaviour of young children for the purpose of scoring on this scale, it may be found difficult to distinguish between behaviour which would score a point on item number three but not on twenty-five, and vice-versa. A little experience soon clears up this difficulty. A child who only *occasionally* (2 or 3 times during the month of observation) touches, pats, pulls, or pushes another child, thereby making some social contact, gains his point for item number three, and also another point for item twenty-five. But a child who *frequently* (10 or more times) pulls or pushes other children about, to their discomfort and in spite of adult reproof, scores zero on item twenty-five though he may gain a point on the previous item number three. He is here showing a definite resistance to social influence and a failure to modify his egoistic, assertive tendencies according to social approval and disapproval.

Some children are gentle with one another from the moment they enter school, probably a result of training and experience at home, and possibly because they have less assertiveness and anger in their make-up. Other children make a few exploratory attempts at pushing or pulling others, but give up after the first week or two. Still others continue to knock their little playmates about for months after they are admitted to school. They are usually aggressive, active children who have been a trouble to their parents and who have built up

skilful management. Size is not necessarily a causal factor, as quite small children are often as aggressive as bigger ones.

26. *Not frequently complained of others to adult for own gain.*

Complaining about the conduct of another is a sign that the child himself knows the difference between good and bad behaviour, and that he is sufficiently interested in the other one to notice and remark on his behaviour. For these reasons a child would score a point on item fifteen for calling attention to another's misdeed. Nearly all children pass through this stage in the course of their social development, but some complain more than others. It is, however, generally conceded that tale-telling is an undesirable habit, probably because it is usually self-seeking and anti-social in intent. This habit is discouraged in nursery schools; the tales are usually just ignored. Thus, any child who is constantly complaining of others for his own gain shows a strong self-seeking tendency and some resistance to social training, and should fail to score on item twenty-six.

There are apparently three kinds of tale-telling or complaining noticeable in the behaviour of nursery school children at school. First, a child may complain of another's misdeed to solicit the adult's help in a struggle. The child may be too weak or too young to have learnt how to defend himself. He may also be backward in development, perhaps spoilt by parents, or too lazy to defend himself. Examples of such complaints are, "He hit me", "He won't let me have this", "He's got my pencil", said in a whiny voice and accompanied by an appealing look. The complaint is thus obviously for the child's own physical gain. All children may complain on occasion for such a purpose, but frequent complaints of this kind indicate the social immaturity of the child, and should not score on the above item. Secondly, a child may complain or tell tales of others' misdeeds for self-glorification by contrast. For example, "he's a bad boy, he spilt his dessert; I didn't, did I?" Frequent remarks of this kind would also cause a child to score zero on the above item.

There is yet a third kind of tale-telling which may be distinguished from the other two, and which represents a later stage in social development. A child may comment upon another's misdeed in an attempt to correct him, and to express to the adult his own interest in correct behaviour. The child

himself is not meaning to be derogatory and priggish, but merely to show his superior knowledge. For instance, a child might say "He's put his hat on the wrong peg", meaning merely "that's not right, is it?" Such a remark is not usually accompanied by the complaining whine which characterizes the complaint calling for aid. It also lacks the air of smug self-satisfaction and superiority accompanying the complaint which aims at drawing attention to the contrasting virtue of the tale-teller. Complaints of the third kind would allow a child to score on items fifteen and twenty-six, for they are not anti-social complaints. Perhaps another item should have been included to give such a child another point, for this is a later stage in development than the mere pointing to others' errors of item fifteen.

When making observations with reference to the above items it is advisable at least at first, to record the actual remarks and manner of the children in relation to the situation in which they occur. This will help one to decide the motive underlying the remarks and the relative frequency of each kind. It will allow one to study the matter at greater leisure away from the school-room, and thus will prevent too hasty and incorrect decisions.

27. Not harassed new child by scoffing or shunning.

A group of children quite often behave like a flock of hens when a stranger is within their midst. Just as hens peck and chase a strange bird, so children may strike and tease a new child in the group. If a very young child is introduced to the group some of the children, especially "only children", will be sufficiently interested to want to play with the baby and will follow him about and be gentle with him. Others will watch at a distance, or ignore him. If the new-comer is older than the members of the group, the children will stare apprehensively at first and later make friendly conversation. A child of the same age as the group may not fare so well.

A new child who is aggressive and who interferes with other children's activity may be treated very roughly. He may be punched and knocked about and scolded loudly, especially by the younger children in the school. The older ones will be more forbearing. If the new-comer is very tearful or obstinate he may be taunted, laughed at or scolded, and

the new child is just quiet and retiring he may be teased by scoffing remarks from the others and left out of group play.

As the children get older they learn to be kind to new-comers and to help them with their new tasks, or at least to leave them alone and not tease them. Part of the training in the school consists in showing the children how to behave in a kind and helpful way towards new children. Thus if a child has been seen to tease or make scoffing remarks at a new child, such as "You're a baby, I don't like you", he fails to score on this item. Also, if he has pushed the child away, avoided his friendly advances or refused to have him in his play group, he fails to score.

28. *Not hit or pinched others for fun several times.*

Items number three, twenty-five, twenty-eight, twenty-nine, and thirty, all refer to the same general type of behaviour. In item three, as already mentioned, a child gains a point for having reached the stage of making some sort of social contact, whether gentle or rough in nature. In all the rest of the above items he fails to gain a point if he continues to make social contacts in a rough and undesirable way after the first two or three attempts. In addition to losing a point for pulling or pushing in item twenty-five, a child may lose a point on item twenty-eight for hitting or pinching another child several times. These are slightly more vicious forms of self-assertion and are met with immediate disapproval on the part of both adults and other children.

Hitting or pinching for fun, through sheer self-assertion and love of power, may be distinguished from hitting in anger by the lack of a provoking cause. A child hits in anger because he has been interfered with or provoked usually by the child he tries to hit. This kind of behaviour is scored on the emotional scale. But when a child hits another for fun, he is not annoyed by anything in particular. In fact it is usually the passive non-interfering child whom he is bold enough to hit or push. An illustrative example may be seen in Figure 14. Such uncalled-for hitting or pinching would cause a child to score zero on the above item. "Several times" may here be taken to mean four or five times.

29. *Not bitten or spit at others for fun.*

A child who has asserted himself by biting or spitting at other children (more than once) fails to score on this item.

Like hitting and pinching, the above forms of aggression are particularly undesirable, and are usually shown marked disapproval by adults.

30. *Not teased in other ways causing irritation or discomfort.*

There are many ways other than those already mentioned in which a child may assert himself to the annoyance of others. Among the most common seen in the nursery school are throwing sand at a child, taking away or hiding his toys, tipping him out of his chair, or hugging him roughly. If a child has done any one or more of these things he fails to score on this item. The actual form of teasing should be written in the space provided after item thirty on the scale, as this may be useful for later reference or comparison. Figure 15 shows a child teasing another.

It is interesting to note that violent hugging is often substituted for the pushing or hitting of the first social contacts which have met with rebuke. The child is not reproved for hugging another child, so he works off his assertiveness by hugging violently, even to knocking the other child over at times. This hugging may also be partly determined by a certain amount of affection for a fellow human-being of about the same age and size. It is often manifested by "only children" or those who get little opportunity to play with children of the same age.

Part B (Supplement to A for Age 3½ to 5 Years)

31. *Offered to share materials with others.*

It is a definite advance in a child's social development when he becomes more interested in the other child than in the exclusive possession or use of certain materials. A child may offer to share his materials with another because he wants the other child's company. He may, on the other hand, have discovered from experience or from the teacher's advice that sharing is the best solution of a struggle for possession of some coveted article. In either case there is marked social advance over keeping the materials to himself. A point should be allowed if a child has once offered to share materials with another. See Figure 17 for an example of sharing property.

32. *Willingly shared own toys or candy brought to school.*

There is apparently a stronger "pull" to actual possessions

the use of all. A child is usually more loath to see his own toys in the hands of another than to give up school toys. It is thus probably a further stage in social development for a child to share property brought from home than for him to share school materials. A point is allowed on the above item if the child has shared anything, such as toys or candy brought from home, whether or not he has been told to do so by his parents. Children are often instructed by parents to share their belongings with other little boys and girls; but when they find themselves free to choose at school the resistance is too great for them to part with their things.

33. *Fetched toy to give another child.*

As has been mentioned already, children are primarily interested in getting something for themselves. Later they get something for themselves and somebody else, and the two together may play with the toy or sit on the mat which has been brought from the cupboard. The social ego is extended outside the immediate self to include the other one for the time being. Another manifestation of the extension of the social ego may be observed when a child fetches a toy for another child and not for himself. Such an act would score a point on this item. A child may do this, in fact probably always does, for a selfish motive at base, but the action itself is a social action and should be credited as such. For instance a child may be playing with a toy which is coveted by another, and in order to remain in possession of the desired toy he offers something else to the other child to appease him. This is a definitely social solution of the difficulty since the other child's desires are taken into consideration.

34. *Voluntarily passed things to others at table.*

This is a rare occurrence at the nursery school as children of this age are used to being fed or having everything passed to them at home. The children are taught to pass things to each other at school, and after a time the occasional child will voluntarily pass a plate of cookies or sandwiches to the others at table. Even the children who act as waiters usually have to be told many times to pass things to others before they refrain from helping themselves first. A point is given if a child has fetched milk for another, or has passed a plate or spoon, or whatever was required at table, without being

asked to do so. See Figure 16 for an illustrative example. Of course, handing out something a child already has, such as a spoon or glass which is not required, does not count. This item is to take into account consideration for others' needs.

35. *Defended rights of smaller children.*

This is another evidence of extension of the ego. At first a child learns to defend himself and not to depend upon adults or other children for protection. Later he may champion the rights of another child probably smaller than himself. His social self is extended to include the other. Defence of another child may take the form of spoken reproof such as ordering a playmate who is hitting or teasing the child "not to do that". It may take the form of a threat to fight him if he does not stop. It may take the form of actual corporal defence, pushing the offending child away or striking him. It may also take the form of a complaint to an adult to come to the assistance of the tormented smaller child. Any one of these actions would score on this item.

36. *Initiated group activities.*

This is obviously a social form of self-expression. A child who invents a game, thus expressing his own interests, and who at the same time finds parts for others to play in his scheme is already becoming well socialized. This is usually a later stage in development than originating new play activities with a single other child, referred to in item number eight. A child who starts and organizes any group game or activity gains a point on this item.

37. *Tried to make a new child one of the group.*

The tendency of children to "pick upon" the new-comer has already been mentioned in connection with item twenty-seven. A child whose sympathy or interest in a younger one causes him to draw towards, rather than away from the new child, is behaving socially. If he takes the new-comer by the hand, tries to help him to march in line with the others, coaxes him to join in some group play or sit next him at table, he gains a point on this item for such behaviour. See Figure 18 for an illustration.

38. *Spoken appreciatively of another child.*

In connection with item fifteen it was pointed out that children's first interest in the behaviour of others is expressed

that children relax their self-defence sufficiently to comment appreciatively about the other child. The remarks may refer to the child as a person, for example, "I like Mary, she's a nice girl". They may refer to general behaviour, such as "Isn't he a good boy"; or they may point out some specific action, as "He's quick, he's finished his dessert", in reference to a child who is usually reprimanded for dawdling over food. Any remark in appreciation of another child would score on this item.

39. *Made appreciative remarks about another child's work.*

Children often watch others at work with great interest but say little about it. What they do say is usually by way of description of what is going on, such as "He's making an engine, I am too". As their interest in other children and their affairs develops, they may exclaim with delight at another's achievement. For example, "Oo, look what John's made. That's good, eh!" Any such comment of appreciation of another child's achievement scores a point on this item. The appreciation may be shown more in the ecstatic tone of voice than in the actual wording of the remark.

40. *Repeated another child's remarks with or without original modification.*

This is a mark of social suggestibility as in the case of items four, five and six. It is a later stage in development than the mere imitation of words in item five. In the latter instance the child picks up the sound and repeats it rather than the idea. As he grows older and his language develops, he tends to repeat whole remarks or ideas slightly changed in form and adapted to his own interests. For example, one child might say, "Santa Claus brought me a doll for Christmas", and another might take up the idea saying, "Santa Claus brought me an engine and a kiddy car". Or, one child might say "I'm making an engine", and another might repeat, "I'm making an engine" (whether he is actually doing so or not), and still another might say, "I'm making an airplane". Any of the above copies or partial copies of the original remarks would score on this item.

Generally speaking the dull child tends to copy the exact remark of the first speaker regardless of its relevance to his own occupation, while the bright child copies but modifies the original remarks to suit himself. This, of course, is not

always the case, as sociable children love to mimic one another. Exact repetition or repetition of a remark in modified form are both credited in this item. It is here desired to show social suggestibility rather than general brightness or dullness.

41. *Tried to correct others without appeal to adults.*

Part of a child's social development consists in learning to do the correct thing at the correct time. He first learns the difference between his own good and bad behaviour. This is the stage reached by most of the nursery school children under three years of age. Later the child takes notice of the social behaviour of others and shows his recognition of the other child's mistakes. He usually either points to or comments upon the errors at first, as mentioned in connection with item fifteen. Later he becomes so anxious to have the child corrected that he makes complaint to an adult, expecting the latter to put the child right. As his independence and self-confidence develop he makes attempts to correct the child himself. He may do this simply by scolding, or by explaining gently to the child what to do, or by helping him and showing him how to do the right thing. Any attempt to correct a child without complaint or call to an adult for assistance scores on this item. See Figure 59 for an example.

42. *Spoken gently to offender when interfered with.*

A child's first reaction when another child interferes with him is usually to squeal or cry for help. This may be accompanied by hitting and kicking movements. In some cases hitting out comes only as a later development when the child has acquired some degree of independence and ceases to cry when he is thwarted in any way. When a youngster has learned to desist from hitting and kicking the interfering child, as a result of both adult and child protests, he usually substitutes loud scolding for this activity. Most of the three-year-olds are more or less at this stage. The children are usually told that they should ask quietly for what they want and they will be more likely to get it. Thus at a later stage still, generally at about four years, the child will show sufficient control of his annoyance and enough consideration for the other child to ask him gently not to do what is annoying him. He may even suggest something else for the offending child to do so as to prevent further annoyance. Such behaviour

43. *Apologized to child for accident or mistake.*

Children usually enjoy their first experience of disturbing another child. They laugh if they accidentally knock over a child's bricks, or trip him up, or hit him while wielding a spade. Very soon their sympathy and understanding grows to the extent of making them refrain from laughing at the discomfiture they have accidentally caused. They stand and stare in silence, looking somewhat perturbed themselves. Some children have reached this stage by the time they enter school. Later they may express their sympathy and perhaps regret by putting an arm around the child they have hurt, or by trying to comfort in some other way. When language is sufficiently developed a child will sometimes apologize for hurting or disturbing another. Any remark such as "I'm sorry, I didn't mean to" scores on this item.

44. *Not pulled roughly at own material removed by another child.*

In connection with item fourteen, it was pointed out that when a child has reached a certain stage in development he assumes responsibility for himself and tries to defend his own rights to materials or place. This usually takes the form, at first, of squealing, hitting the offending child, and pulling roughly at the toy or chair that is being confiscated. Later the squealing and hitting are dropped in favour of verbal scolding; but pulling at the desired object remains. Still later, as mentioned under item forty-two, the child will speak gently to the offender and hold on to the material or chair until some satisfactory agreement is reached. This holding on to the toy or place to which the child has a first right is to be distinguished from rough pulling that might damage the material. If a child has refrained from pulling roughly at material which another tried to take from him he scores on this item, even though he kept hold of the material in defence of his own rights.

45. *Not punched and fought smaller children.*

Some of the bigger children find it irresistible to knock about and fight the smaller ones. It gives them such a delightful sense of power. With the help of reproof and suggestions from the teacher this feeling of power comes to find ample satisfaction in protecting and helping the smaller children instead of bullying them. A child who has been rather a tiresome bully in a group may find great delight in taking care of some

small child, helping him to undress, teaching him how to use materials, or defending him against the interference of others. At the same time his sympathy develops and he refrains from punching the smaller children or handling them roughly. Any of the older children who have refrained from fighting or pushing smaller ones gain a point on this item.

46. *Not made taunting remarks about another child.*

There are ways other than bullying by which an older or bigger child may express his love of power and sense of security in his own power. One way is to taunt other children in a provoking way when they have made some little mistake, when they have been reprimanded by an adult, or when they are otherwise in trouble. Typical jeering remarks from the nursery school are, "You're a silly baby, you're a cry-baby, cry-baby, silly cry-baby", or "He won't eat his dinner, he won't eat his dinner" made into a rhythmic song. The child is apparently conscious of his own virtue for not having made the mistake or done the silly thing, but he shows no sympathy for the other child in trouble. As he develops he learns to control this tendency to "lord over" unfortunate or younger children, and to show sympathetic feeling and helpfulness towards the other child. A point is scored on this item if the child has refrained from making taunting remarks.

47. *Not frequently commanded and regulated others.*

Delight in initiating group play, as mentioned in items eight and thirty-six, and interest in correct behaviour, as referred to in items fifteen and forty, can be over-expressed to the discomfort of others. The behaviour then becomes more of the nature of ego domination than social in character. A child who is constantly ordering others about, telling them to do this and not to do that, placing smaller children in chairs or on the floor to suit his own convenience, may perhaps be showing leadership, but this quality is not being expressed in a socially desirable way. Such a child would ordinarily be called bossy or domineering.

In time the domineering child may see that bossing only annoys other children, and often only achieves the opposite from the desired end. The other children may do just what the young commander does not want them to do, out of protest and annoyance. In time also he may develop sympathy and

children and so become gentle and helpful ; or at least he will learn to leave them alone and not to thwart and bother them. Leadership when it is expressed to the mutual benefit of all, then and only then becomes a social asset. If a child has frequently (perhaps once a day or more) tried to order others about or tell them what they should or should not do, he fails to score on this item. This holds good whether the child commanded the others for his own play purposes, or for the purpose of correcting their behaviour.

48. *Not pressed services on smaller children against their will.*

Just as correcting others may become a social nuisance when pressed too far, so helpfulness may defeat its own end if not expressed wisely. The older children in the group may be so anxious to help the younger ones in undressing, feeding, or use of materials, that they hamper the little ones' movements and interfere with their self-expression. The wise and considerate child will see from the little one's protests or other reactions whether the help is required and appreciated or not, and will continue or desist accordingly. The child who is a little too much dominated by a sense of superiority and the desire for power will continue to press services on the smaller child, even when they are no longer required, and bring protests from the little one. Such a child would fail to score on this item.

49. *Not usually played alone outdoors.*

In some nursery schools children are encouraged to work quietly by themselves indoors, so as to give each other a chance for concentration and to complete little projects without interference. These children may play together outdoors as much as they like. That is why the word "outdoors" is added to the above item. In schools where the children are allowed to play together indoors as well as outdoors this distinction does not apply.

A child who plays by himself in preference to joining with another or a group is usually either lacking in social interest, or feels himself inferior or superior to the others in some respect. In any case he is not behaving socially. If a child's sense of inferiority is such that it interferes with his social enjoyment and co-operation, he is being dominated by self-interest just as much as the child who has not yet developed a social interest. His sense of inferiority may be due to small size, muscular weakness or inco-ordination, inferior intelligence, defect or

backwardness in speech, ill health (including glandular defect), fatigue, or dependence upon adults. The last mentioned is probably due to pampering at home.

Similarly, a clever or older child may find his immature companions so uncongenial that he prefers to play alone. He is more interested in his own pursuits than in his company. Unsociable, bright children often become surprisingly sociable when they are put among their peers in intellectual or other ability.

A child may also be left out of the group just because of his uncongeniality or tendency to undesirable behaviour. Such a youngster, however, if he is socially inclined will usually prevail on some one to play with him for a while. If a child has, with only two or three exceptions, played alone outdoors during the time of observation he fails to score on this item. See Figure 19 for an illustration.

50. *Not been scolded and avoided by the group.*

Although popularity is a behaviour manifestation of others rather than of the child under consideration, in the nursery school it may be taken as a good indication of the social nature of the popular or unpopular child. If a child has been scolded and shunned or even chased by the group, it is almost as sure a sign of the social undesirability of his behaviour as any of his own behaviour manifestations. Children scold one another for what annoys them personally, or for what they know to be wrong. They avoid children who are in disgrace or who annoy them; and they may even unite and "set on" to the bully or the rough torment.

It is true that some children attack or just avoid the new child who has not misbehaved in any way. But if the group as a whole scolds the new child and refuses to play with him or have anything to do with him, then the new child has probably behaved in some disapproved way. He may have taken their toys, knocked down their building constructions, hit them, thrown sand at them, cried frequently, destroyed materials, or done other things of which either children or adults would disapprove. Thus if a child has been scolded by most of the other children, left out of group play or generally ignored, it may be taken that his behaviour has failed to meet the social standards of the group, and he should not gain a point on the above item.

CHAPTER VI
SOCIAL RELATIONS WITH ADULTS
SOCIAL DEVELOPMENT SCALE, SECTION II

Part A (Age 2 to 5 Years)

1. Often spoken to adults.

When children first come to the nursery school they are, generally speaking, more socially adjusted to adults than to other children. They will often cling to the teacher or follow her about even though she be a stranger, while they stand aloof from other children. They also talk more readily to an adult than to a child, as a general rule. There are, of course, exceptions, but observations have shown that all children make some attempt to speak to an adult even from the first day at school, whereas some children may be in school for many days before they try to talk to other children.

Since directed speech may be taken to some extent as a mark of sociability, the more often a child speaks to an adult the more social are his relations with the adult. His actual remarks may not always show friendliness and may even be anti-social in character, but the mere act of communication implies reference to another person and is a social act in itself. If a child has often been noticed speaking to an adult more than once or twice a day, he scores on this item. It is immaterial whether the speech is in the form of well-articulated sentences or monosyllabic words, since that is a matter of language rather than of social development.

2. Usually co-operated in school routine.

A child shows his friendliness towards the adult by co-operation in little routine actions, so as to join in with the adult and to win approval. He has usually learnt to do this to some extent at home before coming to school, but he has to learn afresh to co-operate with strange adults in the person

of the teacher, the psychologist, and others of the school staff. Some children, through unfortunate experiences at home, have built up definite attitudes of unfriendliness towards adults, which they express in different ways. One way is refusal to do what is required of them in the daily routine, refusal to undress on coming in from play, refusal to put away toys or mats, refusal to help move tables and chairs, and so forth. All children assert themselves occasionally in this way, it is a manifestation of their developing independence; but a few may be consistently unco-operative or passively indifferent.

As a child becomes more adjusted to adult authority, more friendly with adults, and more mature, he becomes increasingly co-operative in the little routine tasks of the school. A child who has, with only two or three exceptions, co-operated in school routine scores on the above item. See Figure 20 for an illustration of such behaviour.

3. *Occasionally asserted own rights against adult commands.*

Part of the child's social development in relation to the adult, consists in learning to be independent and also in learning to accept just authority and question unjust authority. A child is required to fit himself into an adult-regulated world, but he must also develop an attitude of self-dependence. It is therefore part of a child's development to stand up for his own rights against the interference of either children or adults. The immature, dependent child accepts complacently all adult impositions and requests, or cries helplessly in disappointment. A child who is developing an attitude of independence protests against undue interference with his plans and activities. It is a good sign when a child, who has previously been acquiescent and passive in the hands of adults, refuses to put away his toys the moment he is asked, whether he has finished his little game or not.

Constant opposition against adults and refusal to comply with requests, however, denotes too much self-assertion in a child and an inability to recognize that others must be considered besides himself. This kind of behaviour is discussed again under item twelve. But since a little self-assertion is an advance over complete passivity, a child gains a point on item three, if he has ever asserted his own rights against adult commands or imperative requests. Illustrations of this kind protesting against running errands or put-

ting away things when the child is nearing the end of some consecutive game, fidgeting when required to sit still an intolerably long time, or taking time with dinner when hurried and fussed by impatient adults. Even in the best regulated schools and households there are occasions when undue demands are made upon children.

4. *Sought adult approval.*

Interest in the approval of an adult is a mark of social advancement just as is interest in the approval of other children. A child who has sought approval by exhibiting his achievement to an adult, by calling attention to his actions, or by recounting his own good deeds, scores a point on this item.

5. *Been willing to be helped.*

A child who shows independence to the extent of refusing all help, whether he needs it or not, is a stage ahead of the dependent child, but a stage behind the child who willingly accepts necessary assistance. He has not learnt to appreciate the value of co-operation and mutual assistance, as evidenced by his behaviour. Having discovered that he can do things for himself he foolishly supposes he can do everything for himself. His love of the sense of new-found power causes him to hold aloof from adults and refuse all assistance. Later he accepts the usefulness of adults and allows them to assist when he cannot help himself. Some children, however, return again to the baby stage for a while after a burst of independence, and ask the adult to do many things they can well do for themselves.

The assertive, obstinate stage of behaviour ordinarily lasts for about a year or more, between the ages of two and four years. Boys reach this stubborn period usually by the age of two and a half and grow out of it by three and a half years of age. Girls apparently reach the period two or three months earlier and grow out of it before they are three and a half years old.¹ Two-year-old babies when they arrive at the nursery school are mostly at the stage of dependence upon

¹ Levy and Tulchin, and Goodenough report similar findings from their studies of resistance and negativism in the mental test situation. These authors find that boys show the most marked negativism around two and a half years of age, while girls are most resistant between eighteen months and two years. The present writer, unfortunately, has no data on children under two years of age to compare with these results.

the adult, requiring to be dressed and undressed, washed and often fed. As they discover their own powers and acquire a sense of independence they often become quite contrary; but by four years of age they have learnt again to respect the adult and to accept authority. If a child has shown, either by protest or gesture, unwillingness to be helped, he fails to score on the above item.

Unfortunately the passive two-year-old would gain a point on this item for being willing to accept assistance as well as the adjusted three- or four-year-old. This is one of the little discrepancies in the scale for which the writer has found no remedy. The very young and immature child, however, fails to score on so many other items that a positive score on this item scarcely affects the size of his total score.

6. *Asked help when needed.*

Another way in which assertiveness or contrariness manifests itself is by not asking for help when it is obviously needed. By refusing to ask for help a child may show a desire to be under no obligation to the adult with whom he is at war for the time being. A child who does not ask for help may on the other hand still be at the passive, dependent stage. He just waits for help to come to him without asking for it. In either case not asking for help when it is needed is an earlier stage in social development than asking for necessary help. A point is therefore allowed on this item if the child has asked an adult for necessary help, such as assistance in the removal of tight overshoes, fastening a stiff button, reaching a high peg, or lifting a heavy table. See Figure 22 for an illustrative example.

7. *Tried to help self when not assisted.*

The dependent child, as already mentioned, will wait or cry for assistance without making an attempt to help himself. The child who has discovered some of his own abilities and is growing in independence will make some effort to help himself if the usual adult assistance is not forthcoming. Any attempt to take off pullovers, unbutton coat, fasten shoes, and so on, in the absence of adult assistance scores on this item. See Figure 21 for illustration.

8. *Always found occupation for self.*

The child who is used to being entertained at home and

himself at school. He lets other children take interesting toys from the cupboard, and sits or stands by in a helpless sort of way. Some children also, when they first come to school, are so distracted by their environment and all the other little people, that they show meagre interest in occupational material, even though they usually occupy themselves at home. These children gradually become adjusted to the new situation and, after a few suggestions from the teacher, they learn to find occupations for themselves. A child who has so far become independent of adult assistance as always to find his own occupation, scores a point on the above item. These occupations may take the form of work with material, active play or dramatic games played alone or with others. Figures 26 and 27 show a child who depends upon adults to find occupations for him.

9. *Usually put away materials before taking out more.*

This item really only applies to children in schools where it is a rule to put away one set of material before taking out another. The new-comer often wants all the materials he can see at once. When he loses interest for one set of material he has nothing more to do with it, and leaves it wherever he happens to have played with it. He immediately goes in search of fresh interest. The teacher explains to him repeatedly that he must put away his toys when he has finished with them so that some one else can have them. He sees the example of other children putting away toys, and he learns, moreover, that he cannot have another's toy until the child has finished with it and put it back in the cupboard. Thus gradually he learns to put away his own toys. The learning process is slow and for a long time there are relapses to forgetfulness. If a child has usually, with only two or three exceptions, put away materials before taking out more, he scores on this item. Putting away toys in this way is a matter of adjustment to adult-imposed regulations and so belongs in this section. See Figure 23 for an illustrative example.

10. *Told own experiences to adult.*

Although describing his own experiences is in a sense self-centred behaviour on the part of a child, the mere act of sharing his experiences with an adult is a mark of sociability and friendliness. It is part of language development that children first learn to verbalize their own actions and experiences, and

then to talk about the doings of others. A child who has voluntarily gone up to an adult and described something he has done, seen or experienced, or something that is planned for the future, scores on this item. Examples of remarks of this kind are, "I saw a birdie when I came to school". "My daddy's got a motor-car, my daddy brought me to school." "Aunt Mary's coming to tea at our house to-day." "I got a kiddy-car at home, I go fast, fast."

11. *Not held aloof from adult.*

Children may hold aloof from adults for different reasons. There is the timid new child who is afraid of strangers but not unfriendly. There is the unsociable child who avoids contact with either child or adult ; and there is the child who is at the stage of reaction against adult authority. Holding aloof is an unsociable act in any case, whether it is due to lack of development of sociability or to the supersedence of some other motive for behaviour. Thus a child who has stood apart or withdrawn from any adult or from one in particular fails to score on the above item.

12. *Not frequently refused to do what adult asked.*

As mentioned under item three, occasional refusal to do an adult's bidding is a healthy sign of growing independence. But constant refusal to comply with requests is a mark of obstinacy and excessive self-assertion. As a child's interest in others and his desire to make a good impression grow, he gradually relaxes his stubborn opposition. He complies more and more readily with requests, and in this way wins adult and general approval. A child who has not yet reached this stage, but who frequently (two or three times a day) refuses to do what is asked of him, fails to score on this item.

13. *Not frequently disobeyed commands.*

Disobedience is here used in a narrow sense, referring to when a child does something he has definitely been told not to do. This is a sin of commission rather than of omission, as in item twelve when a child fails to do what is required of him. Both these kinds of behaviour are sometimes called disobedience ; but it is necessary for the purpose of the scale to limit the meaning as indicated above. Generally speaking, perhaps more opposition to authority is shown by this kind of disobedience than by failure to do what is required. There may, however, be marked stubbornness in either case.

Disobedience may be a revolt against an unduly harsh authority, or the outcome of inconsistent discipline. This is true especially if it persists to a marked degree after four years of age. It may also be only a passing phase of self-assertion at the pre-school independent stage. It is then usually followed by agreeable co-operation with adults. Disobedient behaviour itself is definitely anti-social; thus if a child disobeys adult commands about once a day or more, he fails to score on the above item.

14. *Not usually resisted adult suggestions.*

Resisting adult's suggestions is another mark of self-assertion. If it occurs occasionally it is a good thing, as it denotes independence of thought and action. But if it occurs frequently it is undesirable. Frequent resistance means that the child is unduly assertive and unamenable to social influence. The following are some common forms of resistance in the nursery school: taking a toy from the cupboard other than the one suggested by the adult, "playing trains" with the pegs the child has just been shown how to fit into a board, and insisting on wearing an outdoor garment in school after an adult has suggested that it be taken off.

15. *Not persistently refused to eat dinner.*

Persistent refusal to eat on the part of a healthy child may be a defence against over-anxious coaxing and persuasion, or it may be a way of dominating the adult or of gaining attention. In any case it is motivated by self-interest and shows lack of co-operation with adults or adult regulations. Definite meal hours are after all imposed upon the child by the adult. When a child is sick he may refuse food, but this occurs only once or intermittently, not as a regular thing. If a child has persistently refused his dinner each day, it may be taken that he is showing negativism towards adults in general, or the teacher in particular, and he should not score on the above item. Figure 24 shows a child refusing his orange juice at school although his mother reports that he drinks it at home.

16. *Not ignored adult disapproval.*

A child who shows no concern for adult disapproval is socially immature. This lack of concern may manifest itself in continuing to do undesirable things after being reproved by an adult. A child may also show unconcern by getting into

mischievous or leading others into mischief when quite aware that the adult would disapprove. As a child's interest in others develops he becomes anxious to please, or to avoid displeasing other people. He also learns to avoid adult disapproval if he finds it causes him discomfort. Strong, aggressive children are more apt to ignore adult disapproval than delicate or weak ones, though there are marked individual differences dependent upon home influences. If a child has shown indifference to adult approval by doing what he has been told not to do more than once, he fails to score on the above item.

17. *Not often gone to adult to be petted.*

Following adults about, climbing on their knees, sitting close beside them instead of finding another occupation are signs of a lingering infantile dependence as well as of affection. A child who has frequently, that is almost daily, behaved in one or other of these ways fails to score on this item. See Figure 26.

18. *Not usually wanted to be shown how to use materials.*

The child who finds some way of playing with occupational materials, whether the correct way or not, is showing his independence and self-reliance. The child who waits or asks to be shown what to do with the material each day is still at the dependent stage, or is making a constant bid for attention. Such a child should not score on this item. This holds true whether the child has previously been shown how to use the materials or not. Behaviour of this kind is more a mark of social immaturity in an old pupil than in a new one.

19. *Not sought help by passively waiting.*

Children at the pre-school age are normally quite able to ask for help when they need it. If a child sits passively waiting for assistance to come without asking for it, he is behaving like a dependent infant. He may be lethargic, probably due to illness, or he may be just socially immature. In any case he would fail to score on this item for such behaviour. The more mature child would ask for help or try to help himself if no assistance were available.

20. *Not depended entirely on help in undressing.*

The nursery school child should be able to take off some of his clothes, if not all of them. He should also be able to put

undressing. Which garments a child can remove will depend upon the age of the child and the nature of the garments. Even two-year-olds can ordinarily take off shoes, mitts, hat, and coat if the stiff buttons are undone and the coat eased off the shoulders. See Figure 21 for an illustrative example. If a child has made no attempt to remove any of these things, but has depended entirely on assistance in undressing, he fails to score on this item.

21. Not waited to be fed at table.

Children can generally use a spoon and feed themselves for at least part of the meal by the time they are two or two and a half, when they enter the nursery school. The child who still waits to be fed without trying to feed himself is behaving in an infantile way, and should not score on this item. If a child has made some attempt to feed himself, however messy the result, he gains a point. He is then beginning to show independence of adults.

22. Not depended entirely on help at the toilet.

Although pre-school children may require assistance in buttoning and unbuttoning their pants, by two and a half years of age they are at least able to pull these garments up or down as required at the "toilet." See Figure 25. They should also be able to sit on the toilet seat themselves without being put there by an adult. A child who requires assistance at every stage when going to the toilet would fail to score on this item. But a two- to three-year-old child who sits down himself or who pulls down his own pants is showing independence suitable to his age and would gain a point. Four-year-olds should even be able to fasten and unfasten their own buttons, but a point need not be lost on this item for inability to do so. Independence rather than finger-dexterity is to be considered here.

23. Not deliberately destroyed materials.

Deliberate destruction of materials at the pre-school age, when the child is able to control such actions, is often done to annoy adults. It is then an act of excessive self-assertion, a defiance of authority or an expression of anger. Destruction of materials may also be a result of failure to respond to adult training and indifference to adult disapproval. It may occur sporadically due to excitement, or when a child is in a rebel-

lions and irritable mood. In any case it is anti-social behaviour. Thus if a child has chewed up pencils or cards, torn books, scratched tables, pulled dolls or other toys to pieces, or has done any other act of destruction, he fails to score on this item.

A child should not score zero for accidental destruction, such as when a toy comes apart while he is examining it, or when he drops it unintentionally. Usually a child will show concern over material accidentally destroyed and will try to put it together again; whereas the child who deliberately destroys a thing either shows unconcern about it, or tries to cover his deed on second thought for fear of a scolding.

24. *Not sought other's place for adult attention.*

Seeking another's place for attention is an expression of jealousy. The child is seeking attention for himself at the expense of another and is thus behaving unsocially. It is probable that all jealousy is at bottom wounded self-love and pride. The jealous person objects to sharing or giving up attention or affection which has previously been all his own, or which he aims at getting for himself. In the adult world jealousy may sometimes be socially justified, as when affections are supposedly stolen from the original possessor. But in the nursery school there should be no just cause for jealousy. Attempt is made to treat all children alike, and each one gets a share of attention. A child, therefore, fails to score on this item if he has pushed another child away, who was showing his work or clothes to an adult, in order to exhibit his own. Similarly, he fails to score if he has burst into another's conversation with a grown-up, or has climbed an adult's knee to be petted, pushing away some other child.

25. *Not frequently followed adult about for attention.*

A child who is so dependent upon adult attention as to follow grown-ups about, in or out of the room, instead of finding other occupation is still at a low stage of social development. He is at least showing some social interest in wanting the attention of another, but he is mainly dominated by motives of self-display and desire for attention. Children who behave in this way usually come from homes where they have been flattered with constant attention, and where they have been more or less in command of the household.

An occasional child who has been left to play by himself

at home and who has had little adult attention will follow the teacher about at school. The child from a home where there is a new baby may also try to get adult attention at school to make up for what is being missed at home. In marking the above item no score should be given if a child has almost daily followed an adult about from place to place telling of own experiences, asking questions, making attempts to embrace her, or just standing by silently. See Figure 27 for an illustrative example.

Part B (Supplement to A for Age 3½ to 5 Years)

26. *Related own good actions to adult.*

A child shows his interest in adult approval by exhibiting his achievements and later by describing his good conduct. Remarks illustrating this latter stage in development are, "I put out all the chairs", "I didn't make any spills to-day", "I fixed his napkin for him, he was too small to do it". Any remark of this kind would score on the above item.

27. *Carried on school routine in adult's absence.*

When the teacher leaves the playroom for a while and the children believe themselves to be alone, it is a good time to see the extent of their social development in relation to adult authority. The children who are somewhat defiant of authority, but who behave well for fear of reproof when an adult is present, will probably do something they know they should not do when he or she is away. Those who have accepted authority and hold no grudge against the adult will go on with their work or play as before. When they have finished they will run about or sit quietly and wait till some one comes to tell them what to do next. The child who is especially anxious to please the adult and do the right thing will, in addition to continuing work or play quietly, start the next routine activity, such as taking fresh play material from the cupboard, moving tables into the other room, putting away toys, or tidying the cupboard. A point should be given for any behaviour of this kind. See Figures 28 and 29 for illustrative examples.

28. *Not done forbidden things in adult's absence.*

The child who does forbidden things when the adult is out of the room is behaving in an anti-social manner, asserting himself and in some cases showing defiance of authority. He is being disobedient and somewhat deceptive. The child may

be showing marked fear of reproof by waiting till the adult is away to be mischievous, and lack of desire for adult approval by not doing the desirable thing in her absence. He may, however, only engage in spontaneous mischief when there is no authority present to direct his activities. He then tries to cover up his traces when the adult appears because he is anxious to be approved rather than because he is afraid of reproof. Such relapse in social behaviour is less serious and more common than the former.

Children who continue their work or play contentedly in an adult's absence show that they are friendly towards the adult, have desire for approval and wish to avoid disapproval. They have learnt to accept authority and have no fear of it. A child who jumps about, makes loud noises, scatters material, climbs over furniture, runs out of the room, spits on the floor, throws food about, puts his bread into another child's milk, punches, kicks, or otherwise disturbs other children, or does anything else which has been forbidden, scores zero on the above item.

29. *Not invented excuses for errors and omissions.*

Inventing excuses for mistakes instead of giving true or at least partly true reasons is a form of deception. Any kind of deception is prompted mainly by a fear of punishment or reproof. It shows an untrusting attitude towards the adult and is an act of self-defence. It is true that adults may have been partly responsible for the development of this attitude, but the behaviour itself is socially undesirable. A child shows a certain amount of social development by deceptive behaviour, for he is at least anxious to win approval and avoid disapproval. He is, however, *too anxious* to make a good impression and to appear blameless. Children of three and a half years and even younger ordinarily assume the responsibility for their own actions. Exceptions occur where parents or guardians have been too strict, or where the child seldom wins any favour but is frequently in trouble for misbehaviour. If a child has invented excuses for his own errors or omissions, he fails to gain a point on the above item.

It is difficult to differentiate between an invented excuse and a part truth. All children, and adults too, tend to emphasize a trivial causal factor in a situation in order to appear more praiseworthy or less to blame for an error. Only entirely

fictitious excuses should cause a child to score zero on this item. Partial truths although prompted by the same motives should be let pass as these are more socially acceptable. Among excuses invented at the nursery school are, "He pushed me", when attention was called to spilled milk, and "It's too hard for me", volunteered by a child when asked why he had not taken off his coat, which he could do easily.

It is just possible that a child may have copied his parents in making up excuses, though this is scarcely likely to occur as young as the pre-school age. He might repeat the exact remark of a parent in a similar situation to the one in which the latter had made an excuse; but it seems unlikely that so young a child would carry over the idea of inventing an excuse from a home situation to an entirely different school situation.

30. *Not tried to hide deeds from adults.*

Hiding deeds from adults is another form of deceptiveness. Like making up excuses, it is prompted by a strong desire to avoid reproof or to assert the self by tricking an adult into a false belief. It shows mistrust and unfriendliness. The little deed which the child tries to hide may be only a spontaneous act of mischievousness, such as squirting water out of the tap. It may be a mere accident as when a plasticine tool or a doll gets broken. Or it may be an act of disobedience as when the child hits another roughly while the adult's back is turned, or when he takes somebody else's belongings after being told not to do so.

In the first example the child may stand over the wet patch and scold another child for throwing water, when the adult appears. The child who has hit the other may put his arm around the offended child's neck and pretend to be friendly when the adult is looking. While the child with the broken or stolen toy may try to conceal it in his hand or clothing, or hide it in the room. Any behaviour like the above would cause a child to score zero on item thirty.

31. *Not made abusive remarks to adults.*

Occasionally a child may be heard calling an adult bad names, scolding loudly, or making other abusive remarks. This usually occurs in a fit of anger when the adult has thwarted the child in some way, insisting that he do something he does not want to do, or preventing him from fulfilling his desires. Such behaviour shows antagonism, self-assertion, and a failure

to accept the necessary authority of the adult. The following are abusive remarks made by a child when asked to take out of his mouth a pin that he was sucking: "You good-for-nothing you. You mutt you. . . . I'll tell my mummy, I'll bring a stick and beat you." Occurrences of this kind are rare in school, and the nature of the remarks depends of course upon the language vocabulary of the child. If any child has made abusive remarks to an adult he fails to score on the above item.

32. *Not refused to try to undress or dress self when unassisted.*

When a child over three and a half years of age refuses to try to undress or dress himself he is behaving in an immature, dependent or obstinate way. He is either making a bid for attention, clinging to babyhood, or showing obstinate refusal to comply with adult requests. A child should therefore score zero on this item for such behaviour.

33. *Not constantly sought adult's attention.*

Some small degree of social interest is indicated by the fact that a child wants the attention of others at all. But the motives in seeking attention are largely selfish. All children need a certain amount of individual attention for healthy, social development. A demand for constant attention, however, denotes too great a preoccupation with self and a lack of consideration for others. Children who are continually seeking adult attention at school have usually had their appetites whetted for it by too much attention at home. But, as previously mentioned under item twenty-four, a child who gets too little attention at home may also seek attention frequently at school.

Attention may be sought in various ways: by asking many questions often when there is obviously no interest in the answer, by asking help frequently, by exhibiting every little step in a piece of work, by going up to adults frequently in the middle of play to recount events or experiences, and by following adults about or quietly standing beside them. If a child has behaved in one or another of the above ways he fails to score on this item.

34. *Not appealed continually for praise and approval.*

A certain amount of social progress is indicated when a child shows an interest in adult approval. It is therefore a

good thing when a child exhibits his work or tells of his good deeds on occasion. Continual appeal for approval or praise is, however, determined by too much self-interest and desire for attention. A child who is always wanting adult approval has probably become dependent upon it as a result of too lavish use of praise in the home. He may also be anxious to obtain approval at school because he gets too much scolding and too little praise at home.

Children may ask continually "Is this right", step by step as they perform some little task. Some children will go up to the adult every time another child is reprimanded for anything, saying, "I didn't do it, did I?", "I'm a good boy, aren't I?" Some children never finish a task but they call attention to it, or take it to the teacher for exhibition if the material is portable. Behaviour of this kind would cause a child to score zero. "Continually" for the purpose of this item may be taken to mean several times a day.

35. *Not told untruths to impress or influence adult.*

When a child is so anxious to impress or influence an adult that he tells untruths or makes up fanciful stories and tells them for true ones, he is behaving in a socially undesirable way. His behaviour is determined more by a desire to show off and to gain power than to do what the adult would wish. By four years of age a child is ordinarily quite aware that the adult likes him to relate events as correctly as possible. When he tries to "pass off" untruthful stories for true ones he is trying to show superiority, or to trick the adult into a false belief. Telling untruths like making excuses and hiding deeds is a form of deception. Each has its beginnings at the pre-school age. If the causal factors are discovered at this time and situations changed so as to remove them, these undesirable kinds of behaviour can be checked at their inception.

There are various kinds of untruths told by nursery school children. For instance, a child when recounting his own experiences may exaggerate them out of all possibility of truth. His desire for display is being expressed in this way. With adult help he can find other more socially desirable ways in which to show off. He can also learn to distinguish between true and make-up stories. Secondly, a child may say he has done something which he has not done to win adult favour. When he finds this kind of behaviour does not win favour he

will desist. Further, in order to be first in line, or first to table, or to receive some special treat, a child may say he has washed his hands, combed his hair, or brushed his teeth, when he has not done so. He soon ceases to tell such stories when he loses his expected reward and is sent back to do what he should have done.

An occasional child may relate false stories of ill-treatment at school to win parental sympathy. Examples of this kind of untruth are, "Teacher wouldn't let me have any milk to-day", and "I had to stay in bed all day. I wasn't allowed to play or have any dinner." When parents and teachers check the truth of such remarks, and when reproof or indifference is substituted for sympathy and attention, behaviour of this kind disappears. A child who has told untruths of any sort for the sake of showing off, winning sympathy, or getting some one else scolded, fails to score on the above item of the scale.

CHAPTER VII

SUMMARY OF PRE-SCHOOL SOCIAL DEVELOPMENT

It is impossible to describe the stages of normal social development step for step, month by month, within the pre-school ages of two to five years. There are too many individual differences. Each child enters the pre-school period with a different set of social reactions, based in part upon his particular emotional and instinctive tendencies and in part upon the nature of his previous social encounters. When children from various home environments are brought into the common setting of the nursery school they do, however, show progress in social development each along his own lines. When the number is sufficiently large it is possible, moreover, to distinguish certain roughly defined types among children with similar instinctive and emotional characteristics, or with similar home environments. Children of the same general type, or who enter school behaving in much the same way to the social situation, may progress at different rates because of changing conditions at home and because of physical and other differences. They do, nevertheless, appear to pass through the same or similar stages in development.

General stages of development may therefore be traced, starting with certain common types of behaviour towards the social situation of the nursery school. But no definite age may be attached to these stages as normative standards, since all children do not of necessity pass through the same stages. Moreover, children vary in their rate of social progress, and all stages of development may be found at each age within the pre-school period in any given group of children. There will also be differences from group to group and from school to school, since each nursery school is bound to have its own individual characteristics as a social setting for the children. In particular, the ages of the children in different groups will vary, since the age for school entrance and leaving

varies from place to place. Nevertheless, it seems probable that if a large number of children were studied in many different schools, it would be found that certain kinds of behaviour occur in all schools, and that these appear more frequently at some ages than at others. In this way more or less approximate norms could be established.

Description was given in the last two chapters of the kinds of social behaviour which were observed in one nursery school among little more than fifty children. These forms of behaviour and the stages of progression from one form to another are summarized below. The ages at which the stages in development of the different behaviour types appeared most frequently are also mentioned. These are given more for general interest than because it is thought they represent reliable norms of social behaviour. Many more children would need to be studied in different places and in different age groups, before stages of development could be definitely outlined and age norms appended.

I. SOCIAL RELATIONS WITH CHILDREN

Two-year-olds when they first arrive at the nursery school show only fleeting interest in the other children. They stare at objects and people in the same dazed sort of way, and they approach play materials and adults usually more readily than they do children. When the initial feeling of shyness is dispelled to some extent by friendly welcome, a new child amuses himself first with the play materials alone. He pays little attention to what others are doing. Periodically he watches them. After a while he will be seen to speak to, or answer another child, or to join one in play. He will also be seen to smile in response to another child's laugh, and finally to laugh himself. He will mimic another child's actions and repeat his sayings. At first a child will often turn away from another who tries to make friends with him, but later he shows friendliness in return, smiling or taking the hand of the other child.

A little new-comer usually prefers to stay out of group games or marching initiated by the teacher. He soon responds to encouragement, especially from a friendly older child, and joins in games after a few days at school. Two-year-olds usually play or work by themselves with little reference to others except to claim their toys or otherwise interfere with

them. By about three years of age children appear to want to play in pairs or in small groups of three or four. The child who starts the little game is often older than the others, although this is not always the case.

Small children are frequently passive and dependent when they come to school. They not only expect to have everything done for them, but they expect to have toys given to them when they squeal for them. If another child takes away something a new child has been playing with he may cry for it, expecting to have it given back; or he may stare passively and just let the toy go. As his self-confidence grows the young child learns to defend his own rights. He will hang on to the toy which is being claimed, or kick or push the other child away. Later still he learns to defend himself in a more socially desirable way. By the time he is over three years old he has usually learnt to refrain from kicking or hitting the offending child and scolds him instead.

One of the first reactions of a new-comer to a group, when he becomes interested in the other children about him, is to hit out and watch the effect. This kind of behaviour is not so much characteristic of a particular age as it is an indication of the length of time a child has played with a group of children. New children as old as three and a half or four years may behave in this explorative way, if they have never played much with other children. Such behaviour is, however, more common among children under three. The new child may explore in a gentle way by patting or stroking another child, or he may hit him violently, push him, or throw sand at him. In time he discovers that the more violent behaviour causes trouble and distress both to himself and to others. His interest in various activities develops and he learns to get his thrills and to cause impressive effects in other more desirable ways.

New children claim others' toys, interfere with their work, and often cause considerable disturbance in the play-room when once they have outgrown the shy stage. It takes several months for them to learn not to take another child's materials, and longer still to learn not to interfere in his little games and projects. Desire to please both adults and children, and desire to avoid reproof are both factors in this learning process. These desires grow rapidly with social interest. By the time a child is about three and a half years of age he

usually refrains from claiming others' toys and interfering with individual work. Some children, however, are so anxious for attention and companionship that they find great difficulty in leaving other children alone, and continue to interfere with others' work after they are four years of age.

As a child's interest in others grows he makes attempts to win approval and appreciation. He shows his achievements to others and does things to please. He may offer assistance with difficult buttons and even stop his own work to help another child. At the same time sympathy grows, and it is quite common for a three-year-old to try to comfort another child in distress by caresses or actual assistance. Conversation develops from an occasional remark, usually describing the child's own actions or wishes, to remarks on topics of interest to the other child. Attempts are made to amuse the other child and get him to laugh either by gesture, grimaces, or nonsense chatter.

Children around three years of age show sufficient interest in the behaviour of others to point out their errors either by gesture or complaint. In this way they are also showing their desire to please adults by their recognition of correct and incorrect behaviour. It is quite common for three- and four-year-old children to taunt others by repeating their shortcomings in a little sing-song. The older ones soon desist when they find it causes distress. Children usually appeal to adults at first to correct the misdeeds of others when they have discovered them. But later they make attempts to correct them themselves. The older children in the nursery school, moreover, show appreciation of other children and of their good behaviour in addition to scolding them for their mistakes.

Children over three and a half years of age are often willing to share their possessions brought from home, while those younger usually cling to them jealously. The older children also offer to share school materials on occasion with other children. In this way they show much more consideration for the wishes of others than the young two-year-olds who want everything for themselves, even the other child's toys. Children over four years of age may be seen defending the rights of others, trying to prevent a child from taking another's possessions or from hurting him. They take tender care of the younger members of the group and show forbearance when the little ones try to take their toys.

Some of the bigger children find such intense delight in their sense of power and superior ability that they bully or bother the little ones unduly. They order them about, scold them and try to correct them or press unwanted services upon them. In time they learn to be more considerate and heed the protests of the little ones. They help only when help is needed and show greater gentleness and kindness in their actions.

Older children engage more often in group play than younger ones and seldom play alone. When it is a rule of the school that they work by themselves for a certain time indoors they do so without disturbing the others. They usually wait their turn for little treats and duties in contrast to the two-year-olds who always want to be first. They show more consideration for new children. Instead of shunning or teasing them, they may even entice them to join the group or help them in little school duties. Rough hitting and violence are superseded by spoken requests, such as asking the interfering child to keep away or to give up the desired toy.

In short, between the ages of two and five years children in a nursery school progress from being socially indifferent infants, through the stages of self-assertiveness and interference with the liberties of others, to a stage in which they show consideration, sympathy and kindness for others. They then delight in group play and co-operate with one another for mutual enjoyment. They show real concern for the approval and disapproval of others, and express their own appreciation or disapproval in words rather than in actions. Not all children reach this high degree of social attainment within the pre-school period, while, on the other hand, some children under three show advanced social development. There are very noticeable individual differences. Moreover, children do not progress from stage to stage in a uniform manner. They regress at times to earlier forms of behaviour, or develop new anti-social reactions. But, when all aspects of social behaviour are considered together, most children show progress during the nursery school period.

II. SOCIAL RELATIONS WITH ADULTS

Young children between two and two and a half years of age are occasionally shy even with adults when they first come to school. The majority of children cling to their

parents or guardians until they leave and then respond agreeably to friendly overtures of one or other teacher. They will take the hand of one or play at her suggestion, but will hold aloof from others. Gradually their defensive resistance relaxes and they show friendliness to all the staff.

At first children's remarks are few and usually take the form of protests, wishes, or descriptions accompanying their actions. "No, I don't want to", is a frequent remark heard on the first day when an adult makes a suggestion which meets with disfavour. "I want my mummy", "Baby want dat", or "Car-car" accompanied by a gesture towards a kiddy-car, are typical remarks expressing wishes. As the children become more familiar with the adults they grow in friendliness and talk more freely. At the same time language develops, and before a child is three years of age he may be heard telling little experiences to adults, or making requests for assistance. Some children talk much more frequently to adults than others do. Later still, children will comment on others' misdeeds, describe their own good actions and perhaps even the good actions of others. They will remark upon the teacher's clothes or inquire into her doings out of friendly interest.

Pre-school children under two and a half years of age are generally dependent upon adult assistance for all personal care. They require help in dressing and undressing, in feeding, and at the toilet. They expect this help and either wait passively or cry for it. Many of them even expect to be entertained and wait to be given play things or to be shown what to do with them. In a short time the children discover they can do things for themselves, and they take delight in undressing, washing, and finding their own employment. Many of them become so assertive in this stage of growing independence that they refuse all help and resist suggestions even when help is needed.

After the age of two and a half years for about a year there follows a period of extreme self-assertion and even obstinacy. The child resists adult influence, fails to do what is asked, and at times shows marked disobedience. This kind of behaviour is, however, alternated with acts of thoughtful assistance, co-operation in routine, and friendly conversation. For during this same period the child is becoming more interested in those about him. He is developing a desire to meet

approval and to avoid disapproval, and he finds he can do this by pleasing others. Gradually this conflict between a desire to please and a tendency to self-assertion reaches some sort of solution. The child finds ways of "showing-off" and asserting himself which are not disapproved by others, especially adults; and he gets more and more enjoyment out of doing the approved thing.

Four-year-old children have usually given up their obstinate opposition to adults and take pleasure in co-operating in routine activities. They refrain from doing forbidden things in the adult's absence, but instead carry on the usual routine in an orderly way. They try to help themselves and others and look eagerly for approval. Instead of showing indifference and engaging in fresh mischief they usually show real distress when they are reprimanded.

All children show desire for attention, though some of them manifest more of this desire than others. Little two-year-olds often show this desire by clinging to adults or going up to them frequently to be petted. A few older children do this too. Some children seek attention by continually asking for assistance or for approval of their doings. Others make frequent complaints, and still others keep up intermittent conversation with adults about their experiences or intended doings, or ask innumerable questions. As the children become more interested in each other and in various activities, they become less dependent upon adult attention for their pleasure. The attention of other children and varying occupations form happy substitutes.

Some children develop such a strong desire for approval and fear of disapproval that they tell untruths or show other deceptive behaviour in order to gain their desires. They make up excuses or hide their mistakes. They tell fanciful stories about their prowess or experiences to make an impression. Or they tell untruths to gain sympathy or to have some one else scolded. With adult assistance they learn to distinguish between the true and the fictitious, and between the desirable and the undesirable in their behaviour. They become more interested in right behaviour itself, and gradually their emotional concern regarding approval and disapproval disappears. At the same time the children become more trustworthy and reliable. Apparently children whose parents are considerate and forbearing in their use both of discipline

and praise are less likely to show emotional concern in respect to approval or disapproval.

In brief, children between the ages of two and five years progress through three roughly defined stages of development in their social relations with adults. In the first or dependent stage the child is somewhat passive and relies upon the adult for assistance and attention. The second stage which reaches its height between two and a half and three years is one of resistance against adult influence and striving for power and independence. The behaviour of the child then gradually changes from being resistive or obstinate to being co-operative and friendly. The desire to win approval and avoid disapproval grows. Conversation develops, and topics change from protests and wishes to descriptions of events or actions of mutual interest between child and adult. Thus the third stage, reached usually between the fourth and fifth year, is one in which the child shows self-reliance, trustworthiness, and friendly co-operation with adults.

There are, of course, individual variations in actual behaviour, and each child relapses at times to earlier modes of reaction. The conditions under which a child's social behaviour often falls noticeably below his usual standard are, when he is tired, when he is incubating a disease, when recovering from an illness, and after an emotional disturbance.

PART III

EMOTIONAL DEVELOPMENT

CHAPTER VIII

THE EMOTIONAL DEVELOPMENT SCALE

THE general remarks made with reference to the Social Development Scale at the beginning of Chapter IV apply also in large measure to the Emotional Development Scale. The items can in no sense be considered of equal value as steps in emotional development. For they represent different ways of reacting to the same situation or similar reactions to different situations, any of which may precede or succeed the others in point of time. In the preliminary trials emotional behaviour was found to vary even less directly with age than social behaviour. The scale is therefore not an exact measuring device for emotional development, but rather a means by which children in a group can be roughly differentiated according to general emotionality and to particular emotional trends.

The numerical scores on the scale cannot be taken as precise indicators of the stages of development of each child in the group for the above reason and for many others, some of which are mentioned below. The scores may, however, indicate the grosser differences in emotional development between certain children, and the scores on the separate sections may show the different emotional trends of particular children. The scale is, therefore, of greater value for qualitative analyses of emotional development than it is for quantitative studies.

Among the other factors responsible for the unreliability of the numerical scores as exact measures of development is the fact that items depend upon changing environmental

conditions for their applicability. Different emotion-producing situations occur at different times and these will vary considerably from school to school. Certain forms of behaviour are represented in the scale by several items, while other forms may only be represented by one item, and still other important aspects of emotional behaviour may have been overlooked and omitted. Examiners vary in their ability to observe and interpret events and behaviour, and each person observes certain events more readily than others according to individual prejudices. The same examiner, moreover, is a better observer at one time than another, due to variation in distractions, state of fatigue, health or mood. Further, some children may be observed more continuously than others due to the fact that they arrest the examiner's attention more easily than others do.

Each section of the scale contains items representing different classes of behaviour. In some cases the items are only loosely connected though they belong in general under the main headings. They are grouped together in these sections partly as a matter of convenience and partly for purposes of rough diagnosis. For example, in Section I, Distress and Tears, the first thirty items refer to tearful behaviour, the next ten refer to three kinds of behaviour ordinarily substituted for crying in common tear-producing situations, and the last five refer to verbal rather than tearful expressions of distress or dislike. All items refer in some measure to distress and displeasure.

The items in Section II, Fear and Caution, represent distinctly fearful behaviour in various kinds of situation and also cautious behaviour probably due to previous associations with fear. Section III, Anger and Annoyance, contains items describing anger in reference to certain types of situation and items to show irritation or annoyance. The last six items refer to behaviour usually substituted for angry reactions to commonly annoying situations.

The items in Section IV, Delight and Affection, represent joyous and delighted behaviour, although items twenty-six to thirty-three describe what is popularly called "affection". In classifying the behaviour items it was observed that affectionate behaviour was much the same as joyous or pleased behaviour, but with particular reference to persons. It was also found that marked pleasure, joy and affection were

manifested, particularly by the younger children, in the same kind of exhilarated behaviour best described as "delight". Accordingly these three types of emotional behaviour, delight, joy and affection, somewhat difficult to distinguish at the pre-school level, were all included in the one section. The items in this section are therefore expressions of enjoyment and pleasure, and they are the emotional complement to the items in Section I which include various manifestations of distress and displeasure.

Section V, Excitement and Enuresis, contains items of two general classes—those referring to enuresis and those describing excitement. These belong only very loosely together. They are associated here chiefly because certain forms of enuresis may be due to excitement or emotional tension. The items in Section VI, Mannerisms and Speech Anomalies, also bear only a loose relation to one another. They are vague indications of emotion or emotional associations. The different items are, moreover, indicative of different kinds of emotion, such as fear or annoyance, pleasurable behaviour substituted for these, anxiety due to conflicting emotions and other compound emotional associations. Anomalies in speech are included in this section with other mannerisms because these often have similar emotional histories.

Observation of children's behaviour has shown that emotional as well as social behaviour is determined by certain general types of situation. Social behaviour is determined broadly speaking by present or past contact with persons, adults or children. Emotional behaviour is produced by extensive or intensive change in almost any situation. Such change may affect behaviour through stimulation of the peripheral sense organs or the internal organs of organic sensation. The greater the change the greater the emotion produced. The more disturbing and disagreeable emotions are produced by sudden or gross change which disturbs some long-established habit or which interferes with the satisfaction of instinctive drives and biological needs. Such change produces greater emotional disturbance in subjects who are in a state of fatigue, who are incubating or recovering from some disease, who are weak from illness, or who are suffering mental strain due to conflicting impulses aroused by a complex and difficult situation. Changes which release checked impulses and which result in the satisfaction of instinctive drives and biological

needs produce the more pleasant emotions. These function more readily in conditions of physical health.

Situations productive of unpleasant emotional reactions are disturbance of posture, of sleep or repose, and, interference with eating and toilet habits or with playful and self-expressive activities. Such situations occur frequently in school, as for example when a child falls, hears a sudden noise, is surrounded by noisy interfering children, is reprimanded, is required to do a disagreeable or difficult task, is given unfamiliar food, is required to use a strange toilet, and so forth. Loss of security and the pleasure associated with satisfaction of fundamental needs is also an emotionally disturbing situation, as for instance when a child is left at school for the first time by his mother.

Events which stimulate self-expression, which bring relief or intense pleasure due to association with the satisfaction of physical needs and instinctive drives, produce other kinds of emotional reactions. These are distinguished at the pre-school level from the reactions due to disturbance or interference. Further discussion of the nature and classification of emotional behaviour will be found in Chapter XV. Pleasing events also occur frequently in school in the form of active play, companionship, friendly attention, laughter, special treats, and so forth.

As a result of observation of children's emotional reactions and of the situations in which they occurred, certain situations were found to be more productive of emotional reactions than others; although none of them were found to be invariably productive of emotion. This emotion-producing character of a situation was found to depend upon the nature and relative familiarity of the event or conditions, upon immediately preceding or prospective events and upon the physical condition, instincts, interests and desires of the child concerned.

An emotion-producing situation which was found to bring out several different types of reaction and which is more or less subject to control is the mental test situation. Levy and Tulchin, Gesell, Marston, Jones, Goodenough, Stutsman, Kavin,¹ and others have already made use of this situation for the study of emotional behaviour, but the possibilities of this field of study are by no means exploited yet. The difficult

¹ See Bibliography for the works of these authors.

task presented in a mental examination is often productive of emotional disturbance. It will be observed that this particular situation is referred to frequently among the items in the Development Scale. A difficult task may arouse anger, annoyance, assertiveness, opposition to adults, tears of distress, nervous mannerisms, hysterical behaviour or excitement. On the other hand, success in a task may bring joy, elation and thrilling excitement.

The items in the Emotional Development Scale describe the different kinds of emotional behaviour which occur in situations such as those mentioned above. Although some of these items are grouped into separate parts B to be used only for children over three and a half years of age, and although the earlier exhibited and more violent forms of behaviour are placed at the beginning of the sections, it will be found that there is much overlapping. Older children may have violent emotional upsets, and younger children may behave as stated in the items in parts B of the scale for older children. The items could only be arranged very roughly in order of development for reasons already given. The revised form of the Emotional Development Scale is presented immediately below.

The seventy-five items marked with an asterisk are the ones which were found to be most significant from the standpoint of development when the scale was applied later in the McGill Nursery School. These items are discussed further in Chapter XVI.

EMOTIONAL DEVELOPMENT

SECTION I. DISTRESS AND TEARS

Part A (Age 2 to 5 Years)

The Child has NOT or has :—

1. Cried on arrival at school
2. Cried when left by guardian at school
3. Cried on arrival of guardian to take home
4. Cried when undressed on entering school or in physical examination
5. Cried at the toilet
- *6. Cried at nap-time
7. Cried or whined for mother

8. Cried when required to part with treasured plaything or garment
9. Cried when left alone in room
10. Cried when set apart for discipline
- *11. Cried when reprimanded
12. Cried when slightly hurt by knock or fall
13. Delayed crying at hurt till adult attended
14. Cried when disliked a thing without complaining of it first
15. Cried when wanted a thing without asking for it first
16. Cried when materials or place taken
- *17. Cried when pushed, hit or teased by child
18. Cried in anticipation of disliked event
19. Cried when taken alone from group for examination, etc.
20. Cried when another child cried
- *21. Cried at failure to exert influence over others
22. Cried when work destroyed
23. Cried at own conduct failures
- *24. Cried four times or more during the month
25. Cried at loud or sudden noises
26. Cried when caught upon something
27. Cried at approach of dogs
- *28. Cried on other occasions :—(e.g. . . .)

The Child HAS or has not :—

29. Choked back sobs in attempt to control tears
30. Changed tears to smiles of own accord in a few seconds

The Child HAS or has not, without crying :—

- *31. Called out when hurt by knock or fall
32. Remained silent when hurt by knock or fall
33. Rubbed bump without exclaiming at hurt or fall
- *34. Exclaimed when materials taken
35. Remained silent when materials taken
36. Exclaimed when work destroyed
- *37. Remained silent when work destroyed
38. Hit back when hit by a child
- *39. Exclaimed without hitting when hit by a child
40. Remained silent and passive when hit by a child

Part B (Supplement to A for Age 3½ to 5 Years)

The Child has NOT or has :—

41. Whined or complained frequently about offenders
42. Complained fretfully of physical discomfort :—(e.g. . . .)
43. Complained fretfully of things or events :—(e.g. . . .)
44. Complained of dislike for food :—(e.g. . . .)
45. Complained of heat or cold :—(e.g. . . .)

SECTION II. FEAR AND CAUTION

Part A (Age 2 to 5 Years)

The Child has NOT or has :—

- *1. Screamed, cried violently, and jumped about when hurt
2. Screamed at sight of own blood
- *3. Screamed in physical examining room
4. Screamed when fetched for physical examination
5. Screamed when left alone in room though not as a punishment
6. Screamed at approach of dogs or other animals
- *7. Stood rigid and looked startled at noises
- *8. Held self stiffly and looked wide-eyed when facing new situation
9. Clutched adult when facing new situation
10. Looked for encouragement before venturing on anything new
11. Turned pale after painful or unpleasant experience
12. Avoided place where unpleasant event experienced
- *13. Turned away or withdrawn from strangers
- *14. Refused to go to the toilet at school
15. Tried to avoid going to bed at school
16. Refused to eat unfamiliar food
- *17. Withdrawn from certain apparatus in physical or mental examinations :—(e.g. . . .)
18. Trembled when on weighing scales
19. Refused to play with certain toys :—(e.g. . . .)
20. Refused to sleigh down bank (or slide down chute)
- *21. Run away or withdrawn from dogs
22. Run away or withdrawn from cats
23. Withdrawn to corner or away from group
24. Avoided and sought protection from certain children :—(e.g. . . .)
25. Avoided other things or events :—(e.g. . . .)

The Child HAS or has not :—

26. Approached strangers unhesitatingly
27. Approached strange animals unhesitatingly
- *28. Explored unknown rooms alone
- *29. Readily tried new apparatus or toys
30. Climbed unhesitatingly to top of jungle gym

Part B (Supplement to A for Age 3½ to 5 Years)

The Child has NOT or has :—

31. Asked for removal and protection from feared objects
32. Told of imaginary terrors

33. Told untruths to avoid blame
34. Ignored adult's call to avoid reproof after misdeed
35. Immediately refrained from mischief when adult noticed

SECTION III. ANGER AND ANNOYANCE

(Age 2 to 5 Years)

The Child has NOT or has, when prevented from satisfying own desire :—

- *1. Screamed and sobbed
2. Damaged material
- *3. Lain on floor and kicked
4. Fought and struggled
5. Shouted abusively
6. Bitten offending person
- *7. Stamped foot
8. Pouted and drooped lips
- *9. Become flushed
10. Turned pale

The Child has NOT or has, when required to do something disliked :—

- *11. Screamed and sobbed
12. Damaged material
- *13. Lain on floor and kicked
- *14. Fought and struggled
15. Shouted abusively
16. Bitten offending person
- *17. Stamped foot
- *18. Pouted and drooped lips
19. Become flushed
20. Turned pale

The Child has NOT or has :—

21. Screamed when put alone in room for punishment
- *22. Hit others when work interfered with or toys taken
23. Stamped when work destroyed by others
- *24. Squealed when work interfered with or toys taken
25. Frowned when work interfered with or toys taken
- *26. Hit child who had coveted object
- *27. Usually continued to claim desired object after refusal
- *28. Knocked down or scattered material in difficult task
29. Pulled and banged material in difficult task
30. Tried to destroy material on failure to accomplish task
31. Destroyed others' work on failure to accomplish own task
32. Pouted or drooped lips and refused to go on after failure at task
33. Frowned when reprimanded

- 34. Pouted or drooped lips when reprimanded
- *35. Engaged in other misdeed after reprimanded
- 36. Tried to revenge offences
- 37. Usually taken more than two minutes to recover from annoyance
- *38. Constantly opposed certain adults :—(e.g. . . .)

The Child HAS or has not :—

- *39. Looked at once for other object when refused desired one
- *40. Found other suitable occupation when desired one refused
- *41. Done disliked things without protest
- 42. Let child keep things taken in his absence without protest
- 43. Rebuilt without scolding when work destroyed by others
- *44. Asked interfering child quietly not to touch his work or toys
- 45. Continued without getting hasty with difficult task

SECTION IV. DELIGHT AND AFFECTION

Part A (Age 2 to 5 Years)

The Child HAS or has not :—

- 1. Laughed in active play
- 2. Run about in spontaneous delight
- *3. Clapped hands in delight at things or events
- *4. Joined readily in active games
- 5. Eagerly joined in sleighing (or in sliding down chute)
- 6. Laughed at loud noise
- 7. Laughed when chair upset
- 8. Laughed at peculiar face or noise made by child
- 9. Laughed when others laughed
- *10. Laughed to cause others to laugh
- *11. Laughed at own mistake
- *12. Laughed at other's mistake
- 13. Laughed at unusual events and absurdities
- 14. Exclaimed and smiled at own success
- *15. Displayed or called attention to own work
- *16. Exhibited new clothes or possessions
- 17. Sung little tune to self
- 18. Exclaimed with delight at pictures or objects
- 19. Exclaimed with delight at sight of animals
- *20. Exclaimed with delight at flowers
- *21. Listened eagerly to stories
- 22. Laughed at adult's suggestion in funny story
- *23. Smiled at humorous situation or stories
- 24. Smiled at others
- 25. Smiled back when smiled at
- 26. Sat close up to another child

27. Stood or sat close beside familiar adult
28. Stood or sat close beside stranger
29. Embraced guardian affectionately on arrival
30. Affectionately embraced another child
31. Affectionately embraced adult other than guardian
32. Kissed another child spontaneously
33. Hugged or kissed doll or stuffed animal

Part B (Supplement to A for Age 3½ to 5 Years)

The Child HAS or has not :—

34. Skipped joyfully from one occupation to another
35. Usually joined in group singing
36. Asked for certain games or songs :—(e.g. . . .)
37. Asked to be chosen to wait on table
38. Asked to see or play with toys in mental examining room
39. Exclaimed and welcomed certain foods :—(e.g. . . .)
40. Exclaimed with delight at others' work
41. Exclaimed with delight at others' possessions
42. Talked nonsense to cause others to laugh
43. Held hand of one of babies in group play
44. Asked permission or chosen to sit beside one of babies
45. Asked permission or chosen to take care of one of babies

SECTION V. EXCITEMENT AND ENURESIS

(Age 2 to 5 Years)

*Note :—*The term "special event" in the following items refers to events such as Christmas or birthday parties, visits of photographers or parent of child under consideration, or unusual lessons like clay-modelling, or gardening.

The Child has NOT or has :—

- *1. Wet clothes outdoors
- *2. Wet clothes indoors when unoccupied
3. Wet clothes indoors when visitors present
4. Wet clothes indoors when struggling with difficult task
- *5. Wet clothes indoors while engaged in interesting occupation
6. Wet clothes with excitement over special event
7. Wet bed at nap-time
8. Asked to go to the toilet in intervals of less than an hour
- *9. Required to go to the toilet during physical examination
- *10. Required to go to the toilet during mental examination

The Child has NOT or has, when excited by companions :—

11. Burst into tears
- *12. Cringed or drawn away

- 13. Remained stiff and speechless
- 14. Jumped about and gesticulated
- 15. Become flushed
- 16. Raised voice or shouted
- *17. Giggled and laughed
- 18. Rushed about knocking others
- 19. Got rough with furniture or materials
- 20. Hastened or become careless with occupation

The Child has NOT or has, before, during or after special event :—

- 21. Raised voice or shouted
- 22. Giggled and laughed
- 23. Rushed about knocking others
- *24. Got rough with furniture or materials
- 25. Hastened or become careless with occupation
- 26. Become flushed
- 27. Turned pale
- *28. Eaten less dinner than usual
- *29. Remained stiff and speechless
- *30. Trembled
- *31. Burst into tears

The Child has NOT or has :—

- 32. Rushed about when visitors present
- 33. Raised voice or shouted when visitors present
- *34. Eaten less dinner than usual when observers present
- 35. Usually stopped work when observers present
- *36. Remained stiff and speechless when observers present
- 37. Jumped and shouted with excitement at own success
- *38. Hurried through one occupation after another in excited interest
- 39. Varied from excited to depressed or irritable behaviour on same day
- 40. Varied from excited to depressed or irritable behaviour from day to day

SECTION VI. MANNERISMS AND SPEECH ANOMALIES

Part A (Age 2 to 5 Years)

The Child has NOT or has, when finding a task difficult :—

- 1. Bent head, stiffened body and refused to go on
- 2. Giggled mirthlessly
- *3. Wriggled in seat
- 4. Rocked body
- 5. Shaken foot
- 6. Sighed
- 7. Held mouth open

- 8. Extruded tongue
- 9. Bitten or sucked lip
- *10. Sucked thumb or fingers
- *11. Picked nose
- 12. Scratched
- 13. Twisted fingers or clothing
- 14. Exhibited other mannerisms :—(e.g. . . .)

The Child has NOT or has, when observed or spoken to by adult :—

- *15. Bent head in silence
- 16. Shaken head
- *17. Exhibited other mannerisms :—(e.g. . . .)

The Child has NOT or has, when speaking to adult :—

- 18. Bent head and looked up sideways
- 19. Exhibited other mannerisms :—(e.g. . . .)

The Child has NOT or has, when unoccupied, or in doubt concerning action :—

- *20. Sucked thumb or fingers
- *21. Sucked objects
- 22. Made grimaces
- *23. Jumped up and down
- 24. Manipulated genitalia
- 25. Wiggled or thigh-rubbed
- 26. Exhibited other mannerisms :—(e.g. . . .)

The Child has NOT or has :—

- *27. Exhibited mannerisms when reprimanded :—(e.g. . . .)
- *28. Regurgitated disliked food :—(e.g. . . .)
- 29. Repeatedly expressed feelingful idea :—(e.g. . . .)
- 30. Shown stereotyped or automatic behaviour :—(e.g. . . .)

Part B (Supplement to A for Age 3½ to 5 Years)

The Child has NOT or has :—

- 31. Preserved semi-inarticulate baby-talk
- 32. Lispering or lalling speech
- 33. Slow and halting speech
- 34. Stuttered in speech
- 35. Usually whispered in speech

In order to throw into relief different behaviour types, the items of the Emotional Scale are arranged roughly in groups according to similarity in form of response to different situations and according to similarity of determining situations. These groups are not isolated into separate part sections but they will be readily distinguished on examination

of the scale. As a guide to students and examiners the key numbers of certain item-groups in each section are given below. These are perhaps the main ones, but, as in the case of the items in the Social Development Scale, different groups may be isolated for different purposes. Odd items may be picked out, for instance, to show specific trends of a particular child.

In Section I, items 1 to 9, 18, 19, and 25 to 28 refer to crying as a result of loss of security and fear of the unknown. Items 10 to 17 and 21 to 23 refer to crying from discomfort and annoyance. Items 29 to 40 indicate different ways in which children control tears. Items 32, 35, 37 and 40 refer to silent passivity in common tear-producing situations. Items 31, 34, 36 and 39 refer to vocal exclamation in place of tears, and items 33 to 38 refer to active movement in place of tears in the same situations. Lastly, items 41 to 45 include spoken complaints of dislikes as substitutes for tears.

The first six items in Section II refer to screaming as distinguished from crying in fear-producing situations. This distinction is described more fully in Chapter X. Items 7 to 11 refer to silent tension in fear-producing situations. Items 12 to 25 refer to avoidance reactions in such situations. Items 26 to 30 describe certain "unafraid" reactions to fear-producing situations. In part B the items refer to anticipatory or imaginary fears; in particular, 33 to 35 refer to fear of reproof.

In Section III the first ten items describe different types of angry behaviour as a result of thwarted desires. The next ten items refer to the same types of behaviour in relation to a distasteful requirement. Items 21, 26, 27, 39, 40 and 41 indicate annoyance as a result of thwarted desires. Items 22 to 25 and 42 to 44 indicate annoyance at interference of other children. Items 28 to 32 and 45 refer to annoyance over difficult tasks, items 33 to 35 annoyance at reprimands, and 35 to 38 describe revengeful behaviour.

Items 1, 6 to 13 and 22 in Section IV refer to laughter. Items 14, 23, 24 and 25 refer to smiles, and 2, 3, 4, 5, 15, 16 and 34 refer to more active expressions of delight. Items 17, 35 and 36 refer to singing, and 18, 19, 20, 39, 40, 41 and 42 refer to spoken exclamations of delight. Items 26 to 33 and 43 to 45 describe affectionate behaviour. With regard to the situations producing pleasure, items 3, 6, 7, 13, 18, 19, 20, 34, 37, 38, 39, 40 and 41 indicate delight in things and events,

while 1, 2, 4, 5 and 34 indicate delight in active movement. Items 21, 22 and 23 have reference to interest in stories, and 8 to 12, 26 to 32, and 40 to 45 indicate interest in and affection for persons, especially other children.

In Section V the first ten items concern enuresis. The next ten pertain to excitement at the noise or activity of other children. Items 21 to 31 describe different forms of excitement determined by a special event. Items 32 to 36 refer to certain forms of excitement exhibited in the presence of visitors or observers. Items 37 and 38 describe excitement due to success and keen interest. Lastly, items 39 and 40 refer to variable, cyclothymic behaviour. Apprehensive or distressed excitement is indicated by items 11, 12, 13, 27 to 31, 34, 35 and 36; whereas delighted or joyous excitement is indicated by items 14 to 26, 32, 33, 37 and 38.

The first fourteen items in Section VI represent mannerisms exhibited during occupation with a difficult task. Items 15 to 17 refer to mannerisms exhibited after noticing an adult observer, and 18 and 19 refer to similar behaviour exhibited when speaking to an adult. Items 20 to 26 pertain to mannerisms which occur in the absence of definite occupation. Item 27 refers to the occurrence of mannerisms after a reprimand. Items 28 and 30 concern automatic or stereotyped behaviour, and 29 refers to the repetition of obsessing or persistent ideas. Lastly, items 31 to 35 have reference to anomalies in speech.

It will be seen that the majority of items in the Emotional Development Scale are stated in the negative form. This is because most of emotional development was found to consist in substituting non-emotional behaviour for emotional reactions to disturbing situations. The items in the Delight section are all positive statements, because joy is beneficial to general development and is seldom violently disturbing. It is socially approved and encouraged, whereas tearful depression, fear, anger, nervous or "wild" excitement and fidgeting are all socially disapproved. Moreover, joyous behaviour was found to be a common substitute for tears, fear or anger in certain disturbing situations. It provides a steadying antidote and counteracts the distressing effects of fear and anger.

In the following Chapters IX to XIV the behaviour items in the scale are described at some length, and the method

of scoring is indicated. A few illustrative snapshots are also included. Since there is such a large number of items in the Emotional Development Scale and many of them require little further explanation, they are discussed in each chapter in groups of several at a time. Items which do not fit easily into a group or which require more elucidation than others are treated individually, as were the items of the Social Development Scale in Chapters V and VI.

The word "not" is inserted before each negative behaviour item as previously in Chapters V and VI on Social Development. In these instances refraining from the behaviour described constitutes steps in development and gains points on the scale. In the positive behaviour items, such as those in the section for Delight, behaving just as described constitutes steps in development and scores points on the scale.

CHAPTER IX

DISTRESS AND TEARS

OBSERVATIONS on crying in pre-school children have furnished evidence which corroborates the findings of Lund from studies chiefly of adults. He studied the conditions under which people weep and found that "tears, when affectively produced, are indicative of a mixed emotional state. Neither sorrow, dejection, joy nor elation are very effective, if at all, in producing discharge. Typically, it appears when a depressing or otherwise unpleasant situation gains a redeeming feature, or when tension and unpleasant stimulation is followed by pleasant or alleviating stimulation".¹

When children cry apparently from distress over a fall or because of interference, they are aware that a kind and sympathetic adult will come immediately to their assistance at sound of their cry. Adults have always done so in their past experience. There is relief and satisfaction in the cry as well as fear or anger. The same children when entirely alone do not as a rule weep at such trivial hurts or annoyances. An occasional seclusive child may, however, weep silently alone over some injury. Such a child has previously found relief and satisfaction in self-pity and so again there are mixed emotions present to cause the weeping.

Joyous excitement may also cause tears on occasion. This usually happens when some fear-producing or annoying element is introduced into the situation. A child may cry at a party he is enjoying because there are frightening noises, because another child has got ahead of him in the game, because it is time to go home, or because he is too tired to rush about any more. It seems there must always be mixed emotions to produce tears.

The cry of real pain or fright or intense anger without

¹ F. H. Lund, "Why do we weep?" *Psychol. Bull.*, 1929, 26, 757-758

any alleviating circumstances in sight is a dry cry. A frightened scream or shriek may turn immediately to tears as soon as help comes in sight or the trouble becomes minimized. This may be merely through realization that the trouble is not so bad as was imagined. The pain may be reduced, or some way out of the difficulty may be discovered. The difference between crying and screaming is referred to later in the chapter on Fear and Anger. Following an outburst of tears there is sometimes a period of relaxation and depression. The muscles of the body are soft and somewhat inactive, the posture is often drooping and the lower jaw dropped a little. The cheeks are also slightly flushed or pale or patchy in colour. These may again be evidences of mixed emotion and also of a physiological adjustment after emotional disturbance.

When children first come to school at the age of two to two and a half they cry fairly often, some children more often than others, and their tears are predominantly due to distress or discomfort. There are many changes which disturb the accustomed routine of the little ones and interfere with their fundamental drives. Possibly their emotions are more readily aroused than those of older children, though it is difficult to say whether this is so or not. Children vary considerably, and situations which are new for the younger children are familiar and undisturbing to the older ones.

After a few weeks in school children usually cry very seldom, and by the time they reach three years of age it is rare for them to cry more than four or five times in the month. Some children, however, cry frequently during the first year, and an occasional child will remain a "cry-baby" until after the age for leaving school. When three- and four-year-old children dislike things they usually make verbal complaints about them instead of crying.

The children who remain "cry-babies" after they are four years of age may do so for several reasons. They may have been pampered by over-solicitous parents or guardians so that a number of very pleasant associations have been built up in connection with crying. Crying secures attention, sympathy, a chance to "show off" and to dominate the situation, and many pleasant little ministrations and treats. In other words "it pays" to cry. Some children may have more sensitive nervous systems than others. They may be

more sensitive to sensory shock and their emotions may be more easily aroused. They react emotionally to situations which do not arouse the emotions of others. Children who are backward or who lack the ability to benefit by experience and discover more satisfactory substitutes for unsatisfying modes of behaviour may also remain helpless and tearful. It requires intelligence to develop emotionally just as it does to develop in intellect, skill and social behaviour.

In the following paragraphs the items in Section I are discussed. These refer to crying and some other reactions to distressing situations. The word "cried" in the Development Scale always refers to tearful crying—that is, loud or soft vocalization accompanied by tears.

SECTION I

Part A (Age 2 to 5 Years)

Items 1 to 9 inclusive.

New children may cry on their first day at school, but this does not occur as a rule until they are about to part from their parents or later when they suddenly realize their parents are not there. The arrival at school is full of interest; there are children to watch, new things to play with, new places to explore, and all is quite safe because mother or nurse is there. When mother says "good-bye" there is sometimes a "howl" and tears are shed. But even mother's departure may pass without causing tears, since there are so many distracting and delightful things to do or see. When the time comes to go into the school building, to leave the attractive outdoor playthings and the place where mother was a few moments before, tears may be shed. The unpleasant features of the situation are so increasing that they become emotionally significant and may cause tears.

Some children are quite willing to go indoors and do not begin to cry until they are required to take off their outdoor garments. They cherish their own possessions, these associations with the past and with security. Distress may be so great at the thought of parting with outdoor garments that it can only be alleviated by allowing the child to wear a hat or coat indoors for the time being. These may be discarded willingly later when interest in playthings and new surroundings

Occasionally children who have grown quite used to the school situation will show such attachment to a garment, perhaps a new garment, that they refuse to part with it in school and cry if urged to do so. Dolls, balls, toy trains, tin lids and other treasures brought from home may be cherished in the same way; and tears may be shed when they are required to be put away in lockers or to one side. These things possibly stand for home, security, affection and past moments of delight, and their removal causes a wrench to fundamental desires. When children cry after they have been taken to the physical examining room to be weighed, it is often at the moment they reach the last garment in undressing. They refuse to take off their shoes or their undershirts, as if this meant that their last possession had been taken from them.

New children, even including those who apparently do not mind taking off their outdoor clothes and leaving them in the cloakroom, may be shy of using the school "toilet". A child's toilet habits may be so firmly associated with the home bathroom that only with difficulty can they become associated with any other bathroom or toilet. A child may cry at the anticipatory thought of using the school toilet, or only when told to do so at the necessary time. Children who will not use the school toilet in the presence of the teacher may do so in the presence of their parents, who lend greater familiarity to the situation.

In the same way children may cry at nap-time when they are required to sleep on unfamiliar beds or away from mother's soothing voice and hand. They may also cry if others go out of the room and they are left alone perhaps because they were the last to finish some task. All of the above-mentioned situations produce tears largely as a result of a lost sense of security, the preponderance of newness and a break from familiar and pleasing associations. Children may also become so attached to a new situation, if it satisfies instinctive and urgent desires, that they part with it very reluctantly. Many new children cry when their parents come to take them home because they are loath to leave their new-found toys and delightful playmates.

New children often whimper and whine periodically for mother whenever their interest flags and they realize afresh that mother is not there. Whining is akin to crying and is

characterized by drawling speech in a monotonous tone, rather high in pitch and low in intensity. The corners of the mouth are drawn down, the upper eyelids may be lowered, and the eyes may be watery though no tears are shed. Children who have been attending school for some time may lapse on occasion to a babyish whine for mother. Such behaviour usually only occurs when the child is tired or unwell, and may be prompted by a frightening or annoying situation.

It often happens in school that children are so delighted with the attention, the new toys, and other interests that they do not cry on their first day. They only whimper and appear restless at times when their interest wanes on the second day, but they burst into tears on one or other of the occasions cited above during their third day at school. Some children burst into tears on the second day though not on the first. But crying for the first time during the third day at school has been observed so many times that it deserves further comment here.

Apparently the new interests are so satisfying the first day that they more than counteract the effect of loss of familiar associations. On the second day the novelty has worn off and the new situation becomes less satisfying. Memories of mother and of pleasing situations at home are recalled and there is a gradual realization of something missing. Unpleasant associations with school have also begun to develop, children are found to be interfering, some new adjustments are found difficult, and routine is unaccommodating. On the third day the strain is intense, more unpleasant associations have developed due to the feelings of the previous day, memories of mother and home have become clearer or more potent in effect, and the new interests are now of little moment. Any event which further breaks the tie with home or which requires additional effort at adjustment may arouse a flood of tears.

The outburst may come on arrival at school or on the departure of the parent, on entering school after outdoor play or at other moments during the day. Crying brings comfort and relief. It calls forth attention and reassuring words from an adult and assistance with any difficulty. After such an outburst interest usually revives in school activities. Pleasant associations and a sense of security develop in school and the teacher. There may be no more

tears after this except in unusually distressing situations. Or, there may be a few tears shed each day for a week or two, depending upon the child and his particular home and school experiences.

New children of two and a half or under cry more frequently in situations such as those mentioned in the first nine items of the scale than do children over three and a half. The behaviour, however, is more characteristic of the new child in school than of any particular age. If a child has cried in any of the situations described in these items he should be marked zero against the appropriate ones, and points should be allowed for the remaining items.

In connection with items one and two, it should perhaps be mentioned that parents often increase or even create distress in their children over parting from them. They unwittingly suggest fear and discomfort by leading questions or remarks on the way to school such as, "You don't mind going to school, do you?" or "You won't be afraid without mummy, will you?" or "What is mummy going to do without you all day?" Parents may also show tension and distress at the parting themselves or prolong the "good-byes", until the child who was relatively happy at the thought of school before becomes distressed and tearful.

Items 9, 10, 11, 14, 15, 16 and 17.

Children's first cries in school are usually largely determined by discomfort, fear at strangeness or loss of security, as mentioned above, or by anger at interference. Children cry if their activities are impeded by other children or by adult regulation. They cry when they are reproved for undesirable behaviour. They cry when their wishes are not attended to and their cravings go unsatisfied. They cry if they are forced to do something they dislike, if they are separated from the group and the company they enjoy. They cry when others claim their toys or their seats, and when others hit and tease them. In short, they cry when desires are unsatisfied or when pleasing activities are checked.

These cryings are in part a relief for unpleasant tensions and conflicts and in part a call for aid. As children develop in self-reliance and as their familiarity with the school situation grows, they take a less emotional attitude towards things. They learn to ask for what they want, to find substitute ways

in which to satisfy their desires, to find suitable activities in place of those prohibited, and to do what they wish in spite of the interference of others. A child who previously cried when another took his toy may complain to the teacher instead, pull the toy away from the child, or let him have it and fetch another for himself. Any of these reactions show a stage in development of the control of tears.

If a child has cried for one or more of the reasons mentioned in items 9, 10, 11, 14, 15, 16, or 17 he fails to score a point for the appropriate items. "Left alone in room" in item nine may be taken to mean either left alone by chance or mistake, or left alone purposely for discipline. When a child is left alone he may cry from fear or annoyance or both. An illustration of item sixteen is given in Figure 33, which shows a child crying because another is trying to get possession of the toy he wants himself.

Items 12, 13 and 17.

It is often difficult to distinguish between the cry of discomfort, the cry of fear at loss of security and the cry of annoyance at being thwarted. Possibly all three factors are present to determine the cry. When a child cries from a slight bump or fall he may be crying because of pain and discomfort, because of fear at the shock or loss of support, or because he is annoyed at the unpleasant interruption of his activities. The cry as a result of another child's pushing, hitting or teasing is more often determined by annoyance than real discomfort. The child suffers a "blow to his ego", a check to his self-assertive tendencies rather than a hurt to his body. Any child who has cried over a slight knock or fall when there was no cut or swelling and the impact was light, fails to score on item twelve. A child who cried because he was hit or teased fails to score on item seventeen. Figure 30 shows a child crying because he has been hit by another child and is slightly hurt.

The child who is hurt so slightly that the discomfort itself is insufficient to produce tears may cry after the sight of an adult has aroused a habitual craving for sympathy and attention. The emotion engendered by the unsatisfied craving added to the discomfort of the hurt and the shock are sufficient to produce tears when relief comes in sight and the adult is

in children who have been pampered at home and who have developed an intense liking for sympathy.

When a child is very badly hurt he may not cry at first, but starts to cry only as an adult comes to his assistance. Usually a yell or some kind of exclamation is evoked by a bad hurt even though tears do not flow at first. In any event item number thirteen is not intended to refer to such cases of intense distress and pain. It refers to cases in which the child is only slightly hurt and cries for sympathy and attention rather than as a result of pain. Such behaviour would fail to score on item thirteen.

Items 18 and 19.

Although children usually cry in the nursery school as a result of immediate experience, they may occasionally cry in anticipation of an unpleasant event, such as going to sleep at school away from mother. A new child may be afraid to leave the group to be examined, due to memory associations with previous feelings of strangeness or loss of security in a new situation; and he may dislike to go alone because his gregarious tendencies are being thwarted. A child who has choked when having his throat examined, trembled on the cold weighing scales, or found certain tests difficult, may cry in anticipation of the repetition of such an experience. Gradually a sense of achievement, a delight in special attention and an interest in apparatus come to form pleasant associations with mental and physical examinations and counterbalance any unpleasant ones. Children who have previously cried on the way to the examining rooms in anticipation of unpleasantness, later welcome these events as special treats and ask to be taken for them. If a child has cried in anticipation of an event or when taken away from the group for examination, he fails to score on item eighteen or nineteen.

20. Not cried when another child cried.

A few children are so sympathetic, and their emotions are so easily aroused, that they cry in imitation of others. If a child cries because he is hurt, another child may cry as a result of the sympathetic arousal of similar emotions. Crying of this sort due to suggestion would score zero on item twenty.

Items 21, 22 and 23.

Some children have such strong self-assertive tendencies that they become extremely annoyed and cry when they find

they cannot "boss around" the others to any effect. A child may try to make another sit in a certain place, act a certain part or give up his toys. If he fails to make the other child do his bidding he may cry in vexation. Such behaviour would be marked zero on item twenty-one.

A child may also cry with annoyance and disappointment when his work, perhaps a block-house, has been destroyed. He would fail to score on item twenty-two for this. As children develop they call out, complain to an adult, scold the offending child, or quietly set to work to build up or remake whatever has been destroyed instead of crying about it. When children reach three and a half to four years of age they seldom cry because their work has been destroyed. They may cry for this reason again when they are older if the work has been executed at great labour and embodies an all-absorbing interest. The work interests of four-year-olds are only in their beginnings, they are many and somewhat disconnected. Attention changes rapidly and lightly from one thing to another. Interests develop and become organized with experience so that they tap a number of fundamental drives and feelingful associations.

One of the major interests which children develop early is interest in good conduct. They wish to be approved, to do the things which bring pleasing results. They develop a love of power and set high standards or ambitions for their own achievement. Some children, when they fail to achieve the standards they emulate, when they are afraid of losing adult approval or meeting disapproval, become depressed or annoyed and cry in disappointment. Their assertive tendency or drive for power is thwarted, their love of display is unsatisfied and their self-confidence is shaken. If adults are too harsh in their discipline when a child is already depressed and miserable over his own failure, the little one may develop an emotional attitude of shame towards his conduct. This shame, this fear of failure and disapproval will grow with repeated experiences of like kind until later it may drive the child into more serious delinquencies in order to cover up a deep but inappropriate sense of guilt. Lying, truancy and even stealing may be numbered among his offences. Thus a child who was previously socially sensitive and over-anxious to do the right thing may become a real delinquent.

The little conduct failures such as children may cry over

in the nursery school are, failure to eat or pour milk without making "spills", failure to carry out instructions or complete tasks correctly, and failure to control urination in the play-room or at nap-time. If a child has cried because he has done things of this kind, although he was not reprimanded for the little mistake or lapse in behaviour, he scores zero on item twenty-three.

Figure 32 offers an illustrative example of distress over failure to achieve a desired standard of conduct. The child had wet her clothes on coming into the warm school after outdoor play in the cold. Although the incident was regarded as an accident by adults and no remarks were made, the child herself was distressed and despondent for some time after the incident.

24. Not cried four times or more during the month.

This item was included so as to indicate whether a child cries frequently or only occasionally apart from the nature of the cause. The scores on the various items in the section give a rough indication of the number of times a child has cried for different reasons; but if he has only cried in one type of situation, his scores on the whole section will not indicate whether he cried once or many times. After the first few weeks in school crying is a rare occurrence and children do not ordinarily cry more than once or twice in the month. The youngster who cries on four or more different occasions is quite noticeable, and he would score zero on the above item. Fresh outbursts of tears on the same occasion and from the same cause should not be counted as more than one spell of crying.

Items 25 to 28 inclusive.

Crying at the sound of loud or sudden noises, at the approach of a dog or when caught upon something are all examples of crying from fear. The loud or sudden noise comes as a shock and a disturbance of repose. The sight of a dog may arouse anticipation of a similar shock and a feeling of insecurity, due to memories of his loud bark and sudden pouncing. Being caught on a peg or railing, or on top of the jungle gym, brings a feeling of insecurity and perhaps anticipation of a fall. All these are fear-producing situations to a greater or lesser extent according to the child's past experience. Zero is scored on items 25, 26, or 27 if the child has cried from such a cause.

A child may cry from some cause not specified in the list ; for instance he may cry because his parent is late in coming to fetch him from school. Item twenty-eight provides a place where crying from causes other than those mentioned can be scored. Only one zero may be marked even though there have been several tearful occasions. The actual reasons for the tears may be written under the item in the place provided, for purpose of future reference. Figure 31 shows a child crying because he had trapped his finger between the rope and the bar of the jungle gym over which it passed. Since the hurt was probably fairly severe this incident was scored on item twenty-eight rather than twelve.

Items 29 and 30.

Two ways in which children show attempt to control tears are referred to in these items. Some children after a first little outburst close their mouths, draw in their breath and attempt by muscular control to stop crying. Their breath comes at first in sobs due to the effect of strong emotion upon the breathing mechanism. Gradually the sobs subside and tears cease. The face is solemn and elongated with the corners of the mouth turned down. Sometimes the emotion is too strong and tears break out again in spite of the effort to control them. Often children succeed in "choking back" tears and preventing crying as soon as the tears well into the eyes. Any attempt to "choke back" sobs and control tears scores on item twenty-nine.

Some children will stop crying in the middle of a tearful outburst and laugh or smile at some little incident instead. They swing from the tearful to cheerful emotional behaviour in a few seconds. One child who was crying bitterly because a certain food, which her mother had told her not to eat, was served for school dinner, stopped crying suddenly, smiled and showed the writer the bunny on her handkerchief. If an adult distracts the attention of a crying child from its trouble to something attractive or funny, the child will often smile at the suggestion and cease crying. But certain children change from tears to smiles of their own accord apart from adult suggestion. Only this latter behaviour would score on item thirty.

Sometimes children are so upset after a crying spell that they cannot eat, and at other times crying does not seem to

interfere with their appetites. Moreover, some children are more prone to lose their appetites after crying than others. It is probable that the emotional causes which produce the tears also interfere with digestion and appetite, and that these causes vary in intensity from one occasion to another, even though there is no noticeable difference in the crying. The children who seem to be little disturbed after crying and who eat heartily are probably those whose emotions change rapidly and swing from one extreme to the other. The children who lose their appetites and remain upset for some time after they have been crying show strong emotional habits or tendencies of a particular nature.

Items 31 to 40 inclusive.

This group of items was included in order to differentiate between three kinds of reaction commonly substituted for tears in distressing situations. The items are also arranged so that the child who shows the most mature and desirable behaviour scores the most points. The four situations referred to in these ten items are ones which occur frequently in school. The first, mentioned in items 31, 32 and 33, is the occasion of a bump or fall. Either of these produces discomfort, shock and perhaps fear. The other three situations are annoyances, as when a child's materials are taken (items 34 and 35), or when his work is destroyed (items 36 and 37), or when he is hit by another child (items 38, 39 and 40).

Children at first usually call out or exclaim loudly in place of crying when they are in trouble. This kind of behaviour shows a little control over the more emotional weeping, but it is still impulsive behaviour. Vocal reactions of this sort are referred to in items 31, 34, 36 and 39. Some children substitute violent activity and impulsive gesture for crying. They hit back at the offending child (item 38), or they jump about or rub the hurt places when they have been bumped (item 33). Still others remain somewhat passive and silent without crying in a distressing situation. This kind of behaviour is referred to in items 32, 35, 37 and 40. Such children may be dangerously near to tears or they may be entirely unmoved by the situation.

It is difficult to say which of these three types of reaction is more mature than the others. They are just individual differences and may be indicative of at least two action types

in children. The impulsive type of behaviour in a distressing situation may be exhibited by a child who is impulsive in other ways, whose reactions are rapid and occur readily. The silent, passive behaviour may indicate the habitually inhibited child whose reactions are often slow or jerky. A child who has been annoyed by another, but who remained silent and inactive at the time, may hit the other child much later for no apparent reason. His reactions are delayed and in this case become revengeful in nature.

Most older children in the nursery school react in different ways at different times according to the exigencies of the moment. If they are hurt badly they may call out or rub their bumps. If they are only hurt slightly they pay no attention. If materials they do not want particularly are taken from them they make no fuss, but if they are just starting to use them they may protest. Moreover, if they are hit gently by a small child they pay little attention, but if they are hit roughly they may call out or even hit back in self-defence. Thus if a child has reacted in several ways to the disturbing situations mentioned in items 31 to 40, he scores more points than if he reacted habitually in only one of the three ways mentioned.

A child who always exclaims whether disturbed greatly or not is less mature and controlled than the child who only calls out occasionally and remains silent at other times. Moreover, the child who is always passive and silent is either inhibited and perhaps highly emotional, or he is dull and emotionally deficient. His behaviour is rather odd, and he scores less on this part of the scale than the normal child who exhibits a variety of behaviour. Unfortunately the scale is so constructed that such a child would not make a very low score on Section I. He would gain a full number of points for not crying in the various situations, and would probably obtain the same net score on the section as the child who does not cry but who exclaims when he is disturbed. Only examination of the results on the separate items, in group 31 to 40, will reveal these two types of behaviour.

Part B (Supplement to A for Age 3½ to 5 Years)

Items 41 to 45 inclusive.

Verbal complaint is another substitute for tears usually employed by children over three and a half years of age.

It was found from application of the first tentative development scale that children under three and a half scored fewer zeros on the items referring to complaints than did older children. These items are therefore put into a separate group for use only in connection with older children. They are all negative items because they represent semi-emotional reactions of displeasure, and complaints of this kind are usually made by the younger or less stable children in the older age group.

These items also indicate a few of a child's dislikes. Whining complaints about minor offences with a view to having the other child scolded are marks of immature dependence upon adults and indicate some emotional disturbance. They may indicate helplessness and fear or a wish to retaliate out of annoyance. Almost all children complain occasionally about the others, but a child who is constantly whining or complaining about what somebody else has done is easily disturbed and should fail to gain a point on item forty-one. "Frequently" in this case means more than once a day. Figure 34 shows a child complaining to an adult in the background of the picture, because another is claiming her broom.

Children who complain periodically of physical discomfort, of aches and pains, sore fingers, tight clothes, or uncomfortable positions, are also showing unusual sensibility and should fail to score on item forty-two. It is uncommon for children to complain of discomfort in school. Those who do are probably showing some emotional reaction to their organic or peripheral sensations. The actual, tested sense acuity of children varies very little as compared with their reactions. The apparently greater sensitivity of a child with regard to certain sense fields, such as pain or temperature, is probably due to specific direction of attention and emotional reinforcement of the reaction. This explanation may also account for the "sensitivity" of certain adults in regard to particular sense fields.

Children often remark about things or events, saying, "I don't like that" or "I like this" just by way of a joke or in imitation of one another. They make similar remarks also about persons—"I don't like you" or "I like Mary". Such remarks are generally only intended in fun and may be contradicted by the opposite statement the next moment. These should be distinguished from the fretful complaint exhibiting real dislike, and should not be counted when scoring item

forty-three. "Complaint" in this whole group of items means fretful, whining complaint, or remarks accompanied by such other actions as show real displeasure. A child who has whined about coming in from play, perhaps saying, "I don't want to go in, I want to go home", or a child who has called out appealingly, "I don't want to wait on table" or "I don't want to go to bed" or "I don't like playing Jack and Jill", fails to score on item forty-three.

In the same way complaints about particular kinds of food at table cause a child to lose a mark on the scale. A remark which is made simply to attract the attention of children or adults should not be counted. When a child says, "I don't like carrots" and eats them readily, he is probably mimicking some one else or drawing attention to himself and has no real dislike. But if he shows reluctance to eat the food besides making the complaint, he is probably voicing a real dislike.

Children may also complain of heat and cold. They may refer to hot or cold objects such as soup, plates, ice-cream or snow, and they may refer to their own general feelings. Again a remark merely describing the experience, and expressive of interest rather than discomfort, should not be counted. Only the complaint made in a whiny voice or accompanied by avoidance or other reactions of discomfort should be scored on item forty-five. A child may say he is cold or his hands are cold, and smile at the interesting experience. He may on the other hand look solemn and miserable or shiver as he makes the remark. A complaint is characterized as much by tone of voice, bodily attitude and gesture, as by the wording of the remark.

There is a space provided on the scale after each of the last four items mentioned above where the specific objects of discomfort or dislike may be written. Such information may be useful in connection with the study of particular traits or characteristics of individual children.

CHAPTER X

FEAR AND ANGER

ALTHOUGH fear and anger are popularly considered to be separable and distinct emotions, both physiological and psychological experiments have failed to distinguish clearly between them. Many of the glandular and visceral responses characteristic of fear are also characteristic of anger. Many of the overt behaviour responses of the two emotions are similar, and in adults the accompanying conscious tensions are also similar. Observations of the emotional behaviour of children point to the fact that, while fear and anger may be distinguished theoretically, they so frequently occur together as part of a complex response to a complex situation that it is difficult to study them separately.

These emotions may be distinguished, at least in theory, partly on the basis of difference in the type of situation which arouses each of the emotions and partly according to differences in the behaviour responses. The findings of various psychologists when taken together show that fear in children is primarily induced by shock, sudden or intense stimulation of any of the sense organs prompting "sudden and new adjustment which the individual is unprepared to make".¹ The specific situations which strike an individual with the force of newness requiring fresh adjustment will obviously depend upon the stage of development of that individual in respect to skills, intellect and other aspects of intelligence. We may therefore expect different types of situation to be common fear-producing situations at different age and developmental levels.

Anger, on the other hand, is prompted by a situation which instead of being a sudden call to action is a more or less sudden stoppage or interference with action. The character of suddenness is not such an essential part of the picture in anger as

¹ H. E. and M. C. Jones, "A Study of Fear," *Childhood Education*, 1928, 5, 136-143.

in fear, though in both cases there is a call for quick readjustment. Interference with activity, especially activity motivated by instinctive or universally common drives, is the essential criterion of an anger-producing situation. It follows from the foregoing statements that, since more situations are new to the young child than to the adult and since his behaviour is all more closely related to instinctive drives and the satisfaction of biological needs than that of the adult, he is likely to be more susceptible to fear and anger. Observations certainly show that children exhibit more emotional behaviour than adults. There is, however, not necessarily a steady decrease in emotional behaviour with the growth of maturity, for a number of reasons.

The emotions, including fear and anger, may be aroused through associations with past experiences. Thus, as a child grows, he may build up emotional associations with certain situations; and later, circumstances that are not immediately disturbing may contain elements which revive disturbing associations. The child may not only react to the shock or the interference of the present moment, but he may react emotionally in anticipation of a shock, a sudden call for new adjustment, or in anticipation of interference with activities or plans. It is possible therefore for a child to build up strong emotional habits of fear or anger instead of gradually eliminating the normally emotional behaviour reactions of early childhood. As will be seen in the next chapter, the more desirable emotional habits may also be built up through experience; and behaviour of an opposite kind in the form of joy, interest and affection may take the place of fear and anger.

The distinction between the behaviour elements in fear and anger is not quite so clear as the distinction between the provoking causes. Such distinction can be made even less easily in the behaviour of children than in the behaviour of adults. This may be due in part to the fact that the same situation may stimulate both fear and anger in the child, while only one of these emotions would be aroused in the adult. Children are less discriminating in their perceptions than adults. They may, for instance, perceive a potential danger in an annoying situation, without having a full realization of the nature of the situation or without feeling able to cope with it. For instance when a shoe or garment becomes caught on a nail, a child may cry both in fear and vexation,

whereas an adult in the same situation would know that the danger is not serious and would just be annoyed at the interruption or the torn garment.

As a child develops, fear and anger become more easily distinguished ; and it seems probable that processes of conditioning, co-ordination and differentiation take place in emotional behaviour as in the development of habits of skill and thought. Emotions apparently become more easily differentiated with age and development, and different types of emotional reaction are common at different ages. Further discussion of this aspect of the subject will be found in Chapters XIV and XV. Fear and anger among other emotions are more or less distinguishable at the pre-school age. Their form varies, however, in detail from child to child, and according to the intensity of the emotional reaction.

Violent fear and violent anger are often both accompanied by tearless screaming, followed by crying and sobbing as tension relaxes. There is extreme bodily tension in both cases, but, while the tension is more or less general in fear, there seem to be varying tensions in anger. Intense fear is characterized by momentary or prolonged paralysis of movement, whereas anger is usually accompanied by outbursts of impulsive activity, such as kicking, stamping or "slashing" of the arms.

Sudden shock may produce a momentary check to the breath, followed by rapid breathing or gasping in fear. And similarly, a sudden outburst of anger may result in checked breathing followed by gasping. Most usually, however, fear is exhibited in quick breathing, while anger is often expressed in prolonged holding of the breath and deep respiration. There may be inhibition of speech in both cases, though anger is more frequently accompanied by spasmodic outbursts of violent protestation or exasperated ejaculation. There may be pallor or flushing of the face and trembling in either emotion ; but fear is more usually accompanied by pallor, trembling and perhaps cold perspiration, and anger is often accompanied by flushing or alternate flushing and pallor. Some children tend to go white with anger and others to become flushed. Both emotions may inhibit appetite and digestion.

The milder forms of fear are characterized by a partial stiffening of the body, opening of the eyes, fixation of face muscles, and perhaps trembling. There is usually a with-

drawal movement or actual running away from the object of fear. There may also be protests, appeals for help, and a tendency to cry. Mild anger or annoyance is characterized by aggressive movements, attacking the interfering object or person, loud protests and appeals for help. The lips are protruded into a pouting expression or drooped at the corners in a "sulk". The forehead may be puckered into a frown and the jaw thrust forward as a set for action.

The general paralysis of movement common in intense fear is probably due, at least in part, to the fact that the sudden and indefinite call to action arouses at the same time a number of impulses and action habits, many of which are mutually inhibiting. The lack of complete understanding of the new, the unknown situation which causes fear makes selection of suitable action and quick adjustment impossible. Behaviouristically speaking, there is no fully organized motor reaction pattern to the new situation. Anger is itself a response to an inhibiting situation, which partly accounts for the checked action and momentary tensions characteristic of the first stages of anger. There is, however, usually only a very temporary and partial inhibition, since only certain impulses are thwarted and the situation leaves little doubt as to suitable response. In extreme fear and anger the nervous energy liberated by the highly stimulating situation, and finding no immediate outlet in appropriate motor response, seems to overflow into the sympathetic system and augment certain visceral responses such as vasoconstriction. This further inhibits movement temporarily.

In cases of intense anger resulting in inhibition of speech and movement and perhaps in facial pallor, the causal situation is very complex and contains fear- and anxiety-producing elements. The strong emotion has been aroused in such cases generally by the checking of a highly organized or keen interest. At the same time there are factors in the situation which prevent the individual from giving full vent to his anger. There is the desire to live up to the social standards of conduct or the conflicting wish not to hurt the offending person. In the nursery school there is the presence of the teacher to remind the child that outbursts of temper are taboo and may be punished. Thus fear may be engendered by the situation as well as anger; and the conflict of impulse results in inhibitory reactions rather than convulsive outbursts of anger.

Fear and anger are reduced in intensity as soon as a satisfying outlet for the pent-up energy is found and tension is released. As soon as a child runs about, jumps, laughs, or talks about his experiences, fear diminishes ; and in the same way anger subsides after violent action and the child has "got it off his chest", so to speak. It is, on the other hand, possible for a child to work up a scare or a fit of temper by talking and acting in a frightened or annoyed way upon a slight suggestion. These reactions and the direction of attention gather a train of associations from past experience which augment the immediate stimulus and bring about a real emotional response. This kind of behaviour is somewhat unusual. It is probably due to the fact that emotional outbursts in the past have been attended by a number of pleasurable elements, such as special attention, gratification of wishes, and so forth.

Emotional development in regard to fear consists in the substitution of more and more adequate specific responses to startling or terrifying situations for the earlier exhibited panic. It comes inevitably with greater knowledge and understanding of things in general ; and it comes with the development of a greater variety of responses, of co-ordination and control of movement. After screaming, crying and rigidity as modes of response, children first adopt running away and then partial withdrawal from fearful situations. They refuse to be enticed towards the cause of fear, they hold aloof or avoid the whole situation and pay attention to something else. Exclamations and laughter are often substituted for cries at a sudden noise or fall. Thus gradually, more or less indifference and quick adjustment supersede panic, hesitance and inappropriate responses.

Children can be helped and trained out of specific fears by sympathetic adults or children. A "grown-up" or another child may set a pleasing example in the form of some adequate and "unafraid" response to the situation. This the frightened child will tend to imitate, if he has already learned to make the elementary movements involved. For instance a child may laugh or pull a funny face when a bench upsets. This sets an example or offers a suggestion to the frightened child, who may imitate the behaviour. Adults or children can help also by explaining the nature of the frightening object or situation, and by demonstrating or verbally suggesting

what to do in the face of such a situation. One child gradually grew out of a fear of loud bangs, especially from the explosion of Christmas crackers, by learning to jump instead of cry at the suggestion of another child. The teacher also helped in the reduction of the fear by giving an interesting talk on different kinds of noises and by showing that the cracker was made of paper and could be torn to pieces. When a child develops confidence in his own powers of action in any given situation he becomes less afraid. He develops a feeling of interest in place of insecurity in connection with new and unfamiliar situations.

Emotional development with regard to anger consists in the substitution of more and more socially acceptable ways of removing an interfering nuisance, and in the developing of a greater variety of approved interests and action patterns to supplant the activity thwarted. This is where certain aspects of social development and emotional development overlap. Part of both consists in the socialization of anger responses and in the de-emotionalization of responses to social interference. A close correspondence between children's scores on the Social Scale and on the Anger section of the Emotional Scale bears out this fact (see Chapter XVI).

Children change in their development from stage to stage, substituting verbal protests and pulling at materials for crying, kicking, and fighting. They appeal for assistance or explain their wishes quietly instead of yelling. They share toys, they get something else for the other child or for themselves instead of hanging on to the thing they wanted first. All this comes about when greater general satisfaction is obtained by the desirable form of behaviour than by the emotional upset. Some children find temper tantrums bring so many satisfying results, in the form of attention, power over angry adults, gratified wishes and bribes, that the behaviour habit persists in spite of its other disagreeable elements.

There are certain conditions which make children more susceptible to fears and outbursts of temper. Fatigue, illness, incubation of disease and convalescence, loss of sleep, previous excitement, and previous fears or annoyances all make the child peculiarly susceptible to emotional reaction. Removal of these conditions, or special care in warding off terrifying or annoying situations, when the conditions prevail, helps greatly in the development of emotional control. Most of the more

serious emotional outbursts of the children under observation occurred when they were over-tired, or when they were incubating or recovering from a cold or other illness. The ailing, delicate child who lacks energy and confidence in his own abilities is often timid. And so, also, is the pampered, dependent child who has never discovered his own possibilities.

In the following paragraphs some specific responses to certain fear and anger-producing situations which are included in Sections II and III of the scale are discussed.

SECTION II. FEAR AND CAUTION

Part A (Age 2 to 5 Years)

Items 1 to 6 inclusive.

The word "screamed" in the development scale means loud or high-pitched crying out, followed immediately and later accompanied by tears and sobs. It is a violent crying reaction which should be readily distinguishable from the less emotional weeping. Children scream in sudden and intense fright or anger. They may scream at sudden or intense pain, as when they fall or receive a bump or cut. But it is usually quite difficult to discern whether a child's screaming is due to the sudden shock of a fall, to fear aroused by memory associations, or to the intensity of the pain from the injured part. Probably all three factors determine the screams. As a rule children receive less physical damage than their cries seem to indicate.

Sometimes a child shows only slight disturbance over a fall, but when he catches sight of blood on his hand or leg he screams loudly in terror. This may be a result of past experience and memory associations of other painful bumps or falls which caused bleeding. It may also be sympathetically induced fear due to the suggestion made in facial expression, body tension, words or actions of over-anxious adults. This suggestion may come from an adult present at the time, or it may come through memory associations of similar instances wherein scared adults rushed to the child's assistance.

Very occasionally children scream in school when they are fetched for physical examination or when they reach the examination room. In the former case the screaming is probably due to anticipation of the need for making a sudden or new adjustment, to loss of a sense of security, to dislike

of being removed from the familiar, and perhaps to memories of unpleasant visits to the doctor or even the examining room itself. There may be some anger mixed with the fear, caused by interruption of pleasant play activities. If the cry does not occur till the child reaches the examining room it may be due to a sudden arousal of unpleasant memories by the sight of the room, apparatus or doctor. In this case the mere request to "come and be weighed" was not strongly enough associated with the fear memories to recall them. The screaming may also be due to fear of certain apparatus such as the "wobbly" scales, to loss of security and unpleasant chill when garments are removed, and possibly to anger. The child may be at the obstinate stage of development and may resent adult requests, especially for things he does not want to do.

The child who screams when he is left alone in a room by chance, and not as a disciplinary measure, is probably crying from fright. He feels insecure away from familiar persons and apprehends that some problem might arise which he could not tackle; and there is no one there to help. This apprehension is not exactly conscious, but just an attitude towards new situations based upon unconsciously associated experiences in which the child found his repertoire of reactions inadequate to meet new situations. In a few cases the empty room may call to mind some definite, unpleasant experience which had occurred previously when the child was alone.

Similarly when children scream at the approach of dogs or other animals, they are calling out from fright. They are anticipating the necessity for making some sudden adjustment which they feel inadequate to make. Their fright is also aroused in all probability by association with past experience of sudden barking, pouncing, snapping, or of being knocked over, bitten or scratched by such an animal. Watson's theory that fear of dogs is due to association with the loud sound of their bark seems insufficient to account for all such fears. Very often a child reacts to the dog's bark as if that were one of the least disturbing features of the animal. The suddenness and uncertainty of a dog's actions, its size and strength as compared with those of the child, its roughness though merely playful, coupled with the vulnerability and the instability of a young child on his feet, are additional factors which may determine fear of dogs. Fear of other animals such as

cats and horses may be determined in much the same way. Jones, in an article, "A Study of Fear", offered a similar explanation for fear of snakes and showed how frogs are not terrifying to the young child until they jump.¹

A child who has screamed or cried violently in any of the situations mentioned in the first six items of the section fails to score on the appropriate items. Some of the specific fears of a child may be brought to notice in the scoring of this section, and treatment may subsequently be directed according to the findings. As already intimated, a child's fears will depend considerably upon his particular experiences, but observations show roughly that children under three scream in fright at such events as those mentioned above more frequently than do children over that age. The older children more often withdraw or run away from the fearful situation instead of screaming.

Items 7, 8, 9 and 10.

General stiffening of the body, muscle tension accompanied by a wide-eyed stare are also manifestations of fear. A child may stop work or play, open his eyes and stand or sit rigidly for a moment at the sound of a loud noise, such as the fall of pots or dishes in the kitchen, tyre-bursts on the road, or cracker and paper-bag explosions. A child may also hold himself stiffly, hesitate and gaze wide-eyed in the face of any new situation, such as the mental examining room, a new lesson or a game like walking on a narrow plank. The youngster may clasp an adult's hand tightly or reach out impulsively for the adult's support in such a situation. He may also show his timidity by looking up open-eyed and appealingly for encouragement before venturing on anything new. Any of these various forms of fearful behaviour would cause a child to score zero on items 7, 8, 9, or 10 of this section of the scale. Figure 35 shows a child startled by the sight and sound of a stranger in the sleeping room.

11. Not turned pale after painful or unpleasant experience.

There may be no other indication that the child was deeply moved and possibly afraid in an unpleasant situation than the fact that he turned pale immediately after the event. Such occurrences are rarer among the younger than among the older children. A child may be so brave in controlling his

¹ *Op. cit.*

tears and other impulsive reactions that he gives the appearance of being little disturbed by a cut or a bang. Moreover, a child may turn pale in addition to crying out and showing other evidences of disturbance after a painful event. Any child who has turned pale during or after a painful or unpleasant event, whether or not accompanied by other manifestations of fear, fails to score on this item.

Items 12 and 13.

A most frequent sign of timidity and mild fear is a withdrawal or avoidance reaction. The fear may be a general apprehension, as in a new situation; or it may be due to a specific memory, as when a child avoids the place where he had an unpleasant experience before. New children often hesitate when passing strangers or visitors to the school, and some actually draw away from them. The older ones are not usually so shy. Any child may avoid a place where he had his finger badly trapped, a place where he fell heavily or where he received some other unpleasant surprise. Thus a child who has avoided the scene of some unpleasant experience or withdrawn from strangers fails to score on items 12 or 13.

Items 14, 15, 16, 17, 19 and 20.

There are many things or events in school which a child may avoid out of fear or timidity. A new child for instance may be afraid to use the school toilet and show this fear by an obstinate refusal to be taken there. In the same way he may run out of the room or make loud protests to avoid going to bed at school. He may stubbornly refuse to eat some unfamiliar food at meal-time and perhaps make verbal protests and excuses to avoid eating it. One child under observation would say, "My mummy does not like me to eat that. We don't have that at home", when unfamiliar food was served at school.

A new child may withdraw from the various measuring and examining appliances in the physical or mental examining rooms, either out of apprehension or as a result of specific unpleasant memories. Children may even fight and struggle to avoid the things they are afraid of; and thus fear and anger become indistinguishable in overt behaviour. Probably both emotions are present and are aroused by different aspects of the same complex situation. A child may be afraid of some apparatus, say a manoscope, and at the same time be annoyed

because adult interference and persuasion prevent him from escaping or avoiding the feared object.

Occasionally a child will refuse to play with a certain toy, especially an automatic one which "works by itself". The child is probably afraid of the unexpected movement. New children are also sometimes afraid and refuse to sleigh down a bank with the others, or slide down a board or chute. They are afraid of the feeling of insecurity and loss of support involved. If a child has behaved in any of the above ways he fails to score on the appropriate items.

18. Not trembled when on weighing scales.

A child may be so anxious to co-operate and appear brave that he willingly stands on the scales, but he betrays his timidity by trembling or causing the scales to "jiggle" due to the impulsive contraction of the leg muscles. If a child has thus trembled while being weighed he fails to score on the above item. This behaviour, however, is in advance of refusal to stand on the scales, accounted for in item seventeen.

Items 21 and 22.

A child who has run away from a dog or cat fails to score on one or other of these items. He also fails to score if he has only stiffened, pulled away slightly, or refrained from patting when others were doing so. A child may just flatten himself against a wall, hold aloof and stare apprehensively at an approaching dog or cat without actually running away. Such behaviour is indicative of a slight fear. In Figure 36 the child in the background is seen avoiding the dog.

Items 23 and 24.

Children may show actual fear of some particular child, or of the whole group of children. They are probably uncertain of the others' movements; and they may in addition have had some unpleasant experiences at the hands of other children. A child's fear of another child or of a group of children may also be due to his realization of his own inferior powers as compared with the other child or mass of children. New children quite often withdraw to a corner, or hold aloof from a group of children; and a delicate or pampered older child does so too, probably for the same reasons. Small children are often afraid of rough, impulsive or bullying older ones, and call to adults or other children for protection from

them. If a child has avoided the group or certain particular children he fails to score on items 23 or 24.

25. *Not avoided other things or events.*

Avoidance of any other things or events which are not included in the foregoing items should be scored on this one. A place is provided for recording the actual things avoided for purpose of later reference. Even if there are several instances to be included only one zero may be marked against the item.

Items 26 to 30 inclusive.

These items indicate absence or control of fear in certain common fear-producing situations. The younger children, under three, more frequently show timidity or fear in these situations than do the older ones. A child may hesitate shyly in his approach to strangers, such as school visitors. He may also hesitate in his approach or even withdraw from a strange animal, a dog or cat which happens to enter the playground. He may keep strictly with the group and show no inclination to wander into other rooms; and he may hesitate in the doorway of a room he has not been in before, as, for example, the mental test room. He may show disinclination to try new apparatus or toys and require much coaxing and demonstration before he will touch them. Lastly, he may hesitate to climb the jungle gym and cling tightly on to the bottom or second rung.

On the contrary a child may approach strangers, people or animals, unhesitatingly. He may wander fearlessly into unknown rooms or other places, try new toys or apparatus readily, or climb eagerly to the top of the jungle gym. Fearless behaviour of this kind would gain points for a child on the appropriate items of the scale. See Figures 36 and 37 for illustrative examples.

Part B (Supplement to A for Age 3½ to 5 Years)

Items 31 and 32.

Older children, whose use of language is more developed than that of two- to three-year-olds, will often ask to be protected from a feared object or to have it removed. They show some control of the primitive impulsive tendency to scream or to get away from the cause of fear often without knowing what this cause is. The older child usually knows what he is afraid of and may ask for assistance in his trouble.

Moreover, since his experience is richer than the younger child's and his imagination more developed, he may have a number of imaginary fears.

Such imaginary fears may develop through association with startling events and experiences; but in many cases they appear to be due to the attachment of a growing feeling of apprehension to certain imaginary situations. The child is becoming increasingly aware of the vastness of the unknown, of the things he does not know about. He is getting a partial knowledge of the world through observation, general sense experience, conversation and stories. He learns something about lions and tigers and cougars for instance, and links these bits of half knowledge with his daily experiences. Imaginary scenes are enacted in which both real memories and phantastic creatures play a part. The newness of these creatures carries along with it a feeling of uncertainty and insecurity—anything might happen. "Suppose a cougar came walking down the street just like a dog or a cat, what would he do? Would he eat me up? What should I do?" Such is the child's attitude due to incomplete knowledge and experience.

As children develop and have greater confidence in adults, they may tell of their imaginary terrors instead of remaining silent and acting fearfully. The adult may then help the child by giving additional information, explanation and constructive suggestions concerning what to do in a dangerous situation. If a child has indicated in his conversations that he harbours imaginary fears, or if he has asked for removal and protection from feared objects, he fails to score on one or other of the above items.

Items 33, 34 and 35.

A special kind of fear is the fear of blame, criticism, disapproval or punishment. It is emotion attached to a social attitude or desire, and in some cases may be a mixture of both fear and anger. One indication of an emotional attitude towards reproof is telling untruths in order to avoid blame. A child may say he has washed his hands when he has not done so, or that he did not break the doll's arm when he was the chief cause of the little disaster. Such behaviour may also be motivated by a strong desire to win favour and appear praiseworthy or at least blameless. In fact it is probable

that in the nursery school excuses and untruths are more determined by intense desire for approval than by fear of reproof. Only a study of other aspects of the child's behaviour will reveal which is the stronger motive. For the purpose of scoring item thirty-three, however, it is necessary to make this distinction. Telling untruths in nervous anxiety to avoid blame rather than in cheerful anticipation of praise, causes a child to score zero.

Children may also pretend not to hear a call which they would hear easily on another occasion, because they are conscious they have done something they should not have done and are anxious to avoid reproof. Further, they may be seen to sit up suddenly and refrain from mischief as soon as they catch sight of an adult looking at them, again in order to avoid a scolding. For example, a mischievous youngster may put pieces of toast into another child's plate, stand on the furniture or throw sand about, and may refrain from doing such things the moment he sees that he is being observed. If a child has ignored an adult's call or has suddenly refrained from mischief at sight of an adult, he fails to score on items 34 or 35.

As children grow up, if they are handled judiciously, they become more interested in, and derive more satisfaction from, correct behaviour than from clandestine mischief. They also become less emotionally concerned about approval and disapproval. Factors which bring about such development appear to be as follows : opportunity for outlet and expression of instinctive drives ; reasoning and explanation by the adult so that the child's interest and attention is drawn towards his conduct and away from the matter of adult approval or disapproval ; occasional praise of good conduct, with reference to the advantages and desirability of such behaviour ; and sparing and appropriate use of reproof, accompanied by good reasons for refraining from undesirable behaviour. Among these good reasons, of course, may be the fact that the adult finds the child's behaviour tiresome and interfering.

An unwavering attitude and finality in treatment of each offence help a child to develop desirable habits of conduct. Reproofs which are given with smiles, and threats which are never carried out, only help to establish a child's mischievous habits or leave him in a conflict as to which behaviour is preferable. Children who meet with harsh discipline at home,

or who are alternately petted and scolded, are usually the ones to develop an emotional attitude towards approval and disapproval and to resort to all manner of ways of avoiding blame and reproof.

SECTION III. ANGER AND ANNOYANCE

(Age 2 to 5 Years)

Items 1 to 20 inclusive.

There are two general types of situation which may arouse anger in the young child. One is interference with the satisfaction of strong desires. The other is requirement to do something disliked or opposed to certain likes or desires. The intensity of the anger will depend in part upon the strength of the thwarted desire, or upon the intensity of the dislike. If the dislike is largely determined by fear, as it is in many cases, then the anger may be very marked. The intensity of the angry outburst may also be determined by past experience—that is, by the degree of satisfaction such outbursts have brought, in the form of attention, general disturbance, command over adults, gratification of wishes, treats or bribes. It is further determined by the physical condition of the child : by fatigue, ill-health, lack of sleep, and previous over-excitement. Bad temper may also be an outcome of lack of play facilities, opportunity for muscular activity and the legitimate expression of instinctive desires.

It is difficult to gauge the intensity of the anger in terms of overt behaviour since only certain gross changes in the circulatory and respiratory functions are visible to the general observer, and since the various motor activities may or may not be indicative of intense emotion. There is no doubt, however, about the temper tantrum, since it is accompanied both by violent muscular activity and by respiratory and circulatory changes. This is anger in its most intense form as manifested in the young child. Such behaviour occurs more frequently between two and three and a half years of age than later. This period, it will be noticed, coincides more or less with the assertive period in social development.

The *temper tantrum* is characterized by screaming, crying, and sobbing ; by fighting, struggling, kicking and stamping ; by stiffening and lying on the floor ; and by change in facial colour. Usually children go red in the face with intense

anger, though occasionally they may turn pale or alternately flushed and pale. Other marks of anger which may be manifested in a tantrum are shouting abusively, biting the offending person, impulsive damaging of furniture or other material, pouting or drooping of the lips and puckering of the forehead. It is possible for a child to be angry at a situation without going into a complete temper tantrum; in which case he might only stamp his feet or shout, damage material, bite the offender, or just pout his lips. A real tantrum would involve screaming or struggling and changes in facial colour in addition. In Figure 38 a child is seen pouting because she could not play with her special friend.

If a child has behaved in any of the ways mentioned in items one to twenty, when he was prevented from satisfying a desire or required to do something disliked, he fails to score points on the appropriate items. A decision must be made as to which was the dominant motive for the anger, thwarted desire or disliked requirement; and the behaviour should be counted accordingly in the first ten items or in numbers eleven to twenty.

The same behaviour should not be counted in both groups of items, although both factors may have been present to determine the anger. Usually one is more obvious than the other, as may be seen from the following illustrations. A child may be angry because he is not allowed to bring his sleigh into the playroom, because he may not stay in the sandpile all the morning, because he is told not to spit on his drawing-board or throw food about or take somebody else's belongings. These are all thwarted desires. He may also be annoyed because he is required to put away his toys, pick up his clothes off the floor, go to bed at nap-time, eat spinach or go to be weighed. For the purpose of reference it is suggested that the specific causes of the angry outbursts be inserted in spaces provided after items ten and twenty. Treatment may later be arranged according to the particular needs of the child as revealed by such observations.

21. *Not screamed when put alone in room for punishment.*

When children in the nursery school are obliged to stay in another room for disciplinary purposes the door is left open and the teacher is always within call. There may be only a glass partition between the punished child and the rest of the

group. Thus, if a child screams when he is put in another room for discipline, he is probably much more angry than afraid of the situation. His activities, desires and plans are thwarted, his prestige among the other children is lowered, and he has lost favour with the teacher. This is really a particular instance both of being required to do something disliked and of thwarted desires. Special reference is made to this situation because it is one which recurs in school and which is annoying to almost every child. Some are more angered by the situation than others, and screaming is a sign of intense annoyance. Only an occasional child may be so pleased by the special attention and the fresh interest he finds in the other room, that he is more delighted than annoyed by the situation.

A child who has screamed when put alone in a room for punishment fails to score on this item. He may also lose a point for the same behaviour on item one or eleven according to which of these is most applicable. Usually being put in another room for punishment may be classed as disliked requirement.

Items 22, 23, 24 and 25.

One very annoying situation which occurs frequently in school is interference from other children. When a child's work or play is interfered with or when his toys are taken he may show annoyance in various ways. He may show violent anger as previously described ; or he may show relatively mild annoyance by hitting the offender, by squealing or shrieking, or by frowning. Squealing may be distinguished from screaming or from crying by the fact that it is just a high-pitched yell, a prolonged high note, and is not accompanied or followed by tears and other symptoms of acute distress. Both hitting and squealing are more common reactions of children under three and a half years than of older children ; and squealing is perhaps a later stage in development than hitting. This latter point, however, is questionable.

Frowning—that is, puckering of the eyebrows and forehead—is more common among older children. A child may also stamp in rage when his work is interfered with and especially when it is destroyed. This behaviour is more characteristic of the younger children or those who are easily made angry.

Hitting, stamping, squealing or frowning in anger at interference would be marked zero on each of the appropriate items: 22, 23, 24 or 25. In Figure 41 a four-year-old child is seen frowning when another tries to take away her broom.

Items 26 and 27.

These are specific instances of thwarted desires. Another youngster may have the toy a particular child desires and the latter may vent his anger by hitting the possessor of the toy. Such behaviour would lose a point on item twenty-six. See Figures 39 and 41 for illustrative examples. After asking for what he wants and meeting with refusal either from another child or from an adult, a child may continue to whine, to struggle or to ask persistently for the desired object. Such behaviour may be partly expressive of a keen desire for the object, but it is often due mainly to annoyance at being thwarted. The original desire becomes augmented by the anger emotion. Any method of claiming a desired object for several minutes after refusal would be scored zero on item twenty-seven. See Figure 40.

Items 28, 29, 30, 31 and 32.

A difficult task may also provide an annoying situation. Whether the child has chosen the task himself or whether it has been set by an adult, it becomes annoying when it requires an unexpected amount of effort. The child becomes disappointed and dissatisfied in not being able to complete the task successfully. His instinct for self-assertion and his interest in correct achievement are receiving somewhat of a check. In the case where the task has been set by an adult, as in a mental examination, the child is also receiving a check to his impulse for self-display and to his desire for praise and approval.

After failure to accomplish a task or when finding a task difficult the child's thwarted instinct of self-assertion may find substitute expression in destructive instead of constructive behaviour. The child may knock down a construction or scatter material on the table or floor in exasperated annoyance. He may pull and bang roughly at the material in frenzied determination to master the task. And he may actually try to tear or break the material in disappointment over his failure. Some children just pout, protruding their lips, or let their mouths droop at the corners in disappoint-

ment over a difficult task ; and instead of showing aggressive determination they refuse to go on any further. This avoidance reaction is no doubt determined in part by fear, loss of the feeling of security and self-assurance and fear of further failure. A child may also be annoyed and stubborn in his refusal to continue with a task which he now regards as an imposition by the adult.

A youngster who finds a task difficult or who fails to accomplish it may react to the situation by destroying *another's* work. Since he cannot show-off and assert himself by his own constructive efforts, his infuriated ego finds vent for itself in an act of derogation and destruction. An illustration, already referred to in connection with social development, may be found in the situation where two children of unequal abilities are building blocks together. The less clever child desires to emulate the more skilful one, and on failure to do so he may knock down the other child's block construction. In the mental examining room it is fairly common for a child to knock down the examiner's model after failure to copy it. Behaviour of either kind here mentioned would cause a child to score zero on item thirty-one. The other hasty reactions to a difficult task mentioned in the preceding paragraphs should be given zero marks on the appropriate items 28 to 30 and 32.

Items 33, 34 and 35.

A child may show annoyance when he is reprimanded partly because some of his playful activities have been stopped and partly because his prestige is being lowered in the eyes of the other children and of the adult. His wishes to be approved and to avoid disapproval are receiving a check. The child may pucker his eyebrows and frown, pout or droop his lips, and make no further attempt to assert himself. He may, on the other hand, express his annoyance actively by engaging immediately in some fresh act of mischief. This latter behaviour may be an outburst of pent-up activity which happens to be undesirable, or it may be deliberate revenge against the adult. In any case it would fail to score on item thirty-five. Frowning and pouting as a result of a reprimand would also cause a child to score zero on items thirty-three and thirty-four.

Items 35, 36, 37 and 38.

Revenge is really a delayed anger reaction and is directed always against the offender rather than the offence. It is an

anti-social reaction determined by extreme self-assertion augmented with anger. The offender and the offence become associated because they are part of the same complex anger-producing situation ; and the anger aroused by the thwarting offence becomes attached to the offender, because of an already existing strong self-assertive tendency. The delay of reaction may be due to the fact that the child perceives his disadvantage and realizes clearly or dimly that he would get no satisfaction out of action at the moment. For instance, when a child is being reprimanded by an adult he probably realizes that the adult has got the better of the situation and may punish him more severely for further naughtiness. In some cases delayed anger reactions may be due to an emotional habit of inhibition. These habits probably develop as a result of mixed experiences of fear and annoyance. Certain children are apparently always more delayed in their anger responses than others.

Some children recover from an annoyance in a few seconds, while others remain irritable or inhibited for many minutes or even hours. An occasional child may even revenge offences days after they have occurred. The child who constantly opposes some particular adult does so largely out of revenge for previous thwarting of desires or activities, for scoldings, for punishment or for lack of friendly approval and sympathy.

As already mentioned, a child may try to seek vengeance against an adult by engaging in fresh mischief after being scolded for something. He loses a point on item thirty-five for doing this. He may show revenge by hitting a child some time after the latter has hit him or taken his toys. He may destroy another child's work or take his toys out of revenge for removing his own. Any such behaviour would cause a child to score zero on number thirty-six.

A child who has been irritable, has scolded or hit out, or who has sat silently sulking for more than two minutes after some little annoyance, fails to score on item thirty-seven. A child who has continually opposed suggestions and help from certain adults but not from others, and who has refused to comply with their requests, fails to score on thirty-eight. The names of these adults may be entered in the space provided for reference purposes in order to aid in the search for the particular causes of the trouble.

Items 39 to 45 inclusive.

The behaviour described in the last seven items of Section III is all of a superior kind from the point of view of emotional development. These are desirable reactions to annoying situations. They show control of undesirable ways of expressing anger and diminution or actual absence of the emotion itself. Thus, in item thirty-nine, when a child is refused some object he desires, he may solve his emotional problem by looking for another one which he may be allowed. This behaviour shows more emotional control or absence of anger than screaming and kicking. In the same way, when a child is told that he must not do something he has started, he may find some other more suitable occupation. Behaviour of the kind described in items thirty-nine and forty should receive points. A child who has willingly complied with disagreeable requests, left his play to run an errand, eaten disliked food or given up a treasured toy on request, scores on item forty-one.

Items forty-two to forty-four refer to the annoying situation of interference from another child. If a child instead of showing anger or protest allows another youngster who has taken his materials in his absence to keep them, he scores on item forty-two. Similarly if a child has rebuilt his block construction or other work after another youngster has destroyed it, without shouting or scolding, he gains a point on item forty-three. A child who asks another quietly not to touch his things instead of squealing or hitting out gains a point on forty-four. See Figure 42 for illustration.

Finally, the child scores a point on item forty-five who has continued perseveringly with a difficult task in spite of strain, disappointment or even failure. He does not gain his point, however, if he has shown hastiness or annoyance in any way, such as by banging the material, pulling it roughly, destroying his own or others' work, or by frowning. All the behaviour mentioned in items thirty-nine to forty-five is perhaps more characteristic of children over three and a half years than of those under that age. But since anger appears to be a matter of individual rather than age difference, and since a number of younger children exhibit controlled behaviour of the kind described in these items, they are not separated into a B group for use only with older children.

CHAPTER XI

DELIGHT AND AFFECTION

THERE are varying degrees of enjoyment just as there are varying degrees of distress, fear or anger. But it is difficult to determine these degrees from overt behaviour alone. Especially in the case of joy in organized activity and interests, it is difficult to tell how much joy is present. The earliest and most common evidences of enjoyment at the pre-school age are impulsive actions together with smiles and laughter. These may be expressive of intense enjoyment or general delight, such as infants show when they are pleasantly stimulated. This "delight", in pre-school children, appears to be aroused by marked sensory stimulation of a pleasing or satisfying kind, by sudden realization of a long unsatisfied desire, by general freedom of activity, and by gratification of instinctive impulses or keen interests. The milder but more highly developed emotion of "joy" is aroused in similar situations, though the stimulation is usually less intense, the desires less obviously instinctive and the interests more organized.

Children may thus enjoy certain sense experiences, just as they may be depressed, fearful or angry at others or even the same ones. They may take delight in action just as they may fear it. Usually the action which is enjoyed is that which appears likely to bring satisfying results, while feared action is that which appears likely to bring unsatisfying results. Delight in action is bred of confidence and a sense of security, while fear of action is the result of doubt and a feeling of incompetence.

Delight may be expressed in an exclamatory vocalization, preceded, perhaps, by a deep breath. "Oo" is the most common childish expression of sudden delight. There is usually also a contraction of the cheek muscles and extension or opening of the mouth in a smile or laugh. The lower eyelids may be raised while the upper ones remain open. Some-

times the cheeks become a little heightened in colour. The muscles of the body are neither tense nor flabby but rather normal in tone, and the child usually makes a welcoming gesture towards the cause of his delight or actually approaches it. He may engage in other spontaneous and pleasing activity, such as running, jumping, clapping, singing, talking or laughing.

Laughter is one of the most common expressions of delight just as tears are of distress. Both these reactions appear to be the result of mixed emotion. In the former case pleasure and enjoyment are dominant, while in the latter case discomfort and fear or annoyance predominate. Laughter is a sudden release of pent-up energy, of tension due to previously unsatisfied or only partially satisfied desires. These desires have been held in abeyance while others were being satisfied. For instance, self-assertion may have been in abeyance, while the wish to submit and be assisted was being satisfied; or the desire to win approval may have been held back, while a pugnacious impulse was being satisfied. Many instinctive desires are held in check or receive only partial satisfaction in ordinary social life. Laughter is provoked by a pleasing or satisfying experience following upon a slightly displeasing or unsatisfying one. Tears, on the other hand, seem to occur when some relief follows upon an essentially displeasing or distressing experience.

Tears may be changed to laughter or laughter may be substituted for tears when the pleasing elements of the situation become dominant or reach the focus of attention. For example, a child may stop crying and even laugh over his fall when he sees the absurdity of his posture or the unusual disarrangement of his clothes; his coat, for instance, may be over his head. Children, moreover, may laugh at loud startling noises because of their unusual or absurd nature. Ability to notice absurdities, of course, depends on knowledge, experience and interest in the fitness of things. Delight in the absurdities which form part of a distressing situation seems to be augmented by transferred emotion. It seems as if there were a pendulum swing from an unpleasant to a pleasant emotion. The nervous energy liberated by the startling or disturbing part of the experience perhaps augments the reaction to the pleasing or amusing elements of the situation after the attention focuses on these elements. This all comes about possibly as a result

of the universal drive to make a pleasing and satisfactory adjustment to every problematic situation. Laughter, moreover, may be found to bring more friendly attention and other satisfaction than tears. Only certain children make their adjustment in the above way of laughing instead of crying when they are startled. Others remark, jump, move away, look around, and so forth.

Highly stimulating circumstances, which though pleasing come as a sensory shock or which liberate strong instinctive drives, may produce excitement. This is a mixed emotion which differs in certain respects from delight and is referred to in the next chapter. Joy comes with the satisfaction of organized interests and of several combined impulses. Pleasure, or enjoyment, is a subjective feeling tone occurring both in delight and joy. It comes with mild sensory stimulation and the warm glow of healthy bodily functioning. Pre-school children at first show delight in simple activity and new objects by smiling, laughter or welcoming gesture. Later they show more complex joy in the satisfaction of certain developing interests and desires by exclamation, approach and other specific actions appropriate to the particular interest. Children vary enormously in their expressions of delight and joy. Some laugh frequently, some laugh and smile on occasion, while others smile or laugh very seldom. Most children run or skip with delight occasionally, though some do this more than others.

Joy not only springs from interest and the satisfaction of desires, but it also apparently helps in the development of such interests and of active skills. Among the fourteen children under observation who had access to plasticine as a play material, only three or four showed marked interest in it and frequently used it. When left to themselves all that these children would do with the plasticine was to pick little pieces off the big lump or make balls and rolls. One day the teacher started to make pencil sketches of the various achievements as illustrative of the modelling ability of children of that age. The joy in an opportunity for display, for adult attention, praise and approval caused these children to work at their plasticine with additional interest and enthusiasm. Without any suggestion from the teacher first one and then another made some recognizable attempt at construction of an object in plasticine. Sometimes they would name their objects and

sometimes not. But as soon as each child had completed a model he took it to the teacher to be drawn.

In a few weeks' time most of the children in the class had developed modelling skill above anything that had been witnessed in the previous three years of the school's existence. Instead of rolls and balls the children were now making, of their own accord, recognizable bridges, aeroplanes, boats and men. They had apparently developed this skill as a result of the joyous emotional reinforcement of action and the tapping of the instincts of display and rivalry and of the desire for appreciation.

One particular cause of pleasure and delight which deserves special consideration is human "affection". Demonstrated affection usually brings responses of delight from a child, but it may also be met with reciprocal affection. Children enjoy the kindly attentions, the sympathy, the warm contact experiences, and the satisfaction of their needs for food and comfort, which they receive from certain persons. They enjoy being loved, and they express their enjoyment in the usual way, with smiles, exclamations of delight, and approaching gestures. They may also imitate the caressing behaviour and the actions which please them. These bring further affectionate responses from the other one, and the child derives pleasure from such results. This strengthens the pleasure he derives from his own actions. Thus a child learns to enjoy giving affection as well as receiving it.

At first pre-school children appear to derive more pleasure from adult affection than from the demonstrated affection of other children. The adults have been responsible for giving them more comfort, more sympathy and more interested attention in the past. Gradually the little ones derive more and more pleasure from the attentions of other children. They learn at the same time to return affectionate embraces both to adults and to children. Later still, when the children have reached the age of three years or more, they show spontaneous affection, sympathy and kindly attentions towards other children usually smaller than themselves. They behave like the adults in their previous experience and show a kind of maternal affection. They thus derive pleasure from embracing, comforting or assisting another rather than from receiving such attentions, as in filial affection.

Observation of children's behaviour shows that no doubt

the tendency towards self-assertion finds some satisfaction in maternal behaviour, while the tendency to submit and to depend on others' assistance is satisfied in filial behaviour. If there is a parental instinct, satisfaction of this drive in maternal behaviour may also account for the joy of maternal-affection. The gregarious instinct is being satisfied in both types of affection and perhaps also the sex instinct. There is no evidence, however, of sex preference in the affection of pre-school children for each other. Noisy and energetic boys perhaps tend to play together. But these same boys may kiss little girls or smaller boys spontaneously.

In the following paragraphs behaviour responses of delight to specific situations which occur in the nursery school are mentioned and discussed. These are the items in the fourth section of the Development Scale. Of course only a few of the many circumstances which cause enjoyment, and only the more outstanding expressions of delight and affection are referred to in these items. They constitute a sampling of child behaviour as do the items in other sections.

SECTION IV

Part A (Age 2 to 5 Years)

Items 1 to 5 inclusive.

Pre-school children from their first day at school show delight more readily in active play than in anything else. They laugh or smile at their occupations and especially at running games or dumb motion games. They run about with smiles on their faces for sheer delight in the movement. Figures 43, 44 and 49 show several children smiling and laughing with delight in active movement. Some children enjoy activity much more than others, as may be judged by the frequency with which they engage in active pursuits. Some children join in active games more readily than others. This may be determined by social factors as well as pleasure in activity. Some sleigh down the bank eagerly in the winter time, or slide down the chute in the summer. More fearful children refuse to do either, while others will enjoy a toboggan slide in company with an adult, but will not venture down the bank alone. Laughter and smiles and eagerness to continue a pleasing event are the early and most usual manifestations of delight. Occasionally a two-year-old will clap his

hands in delight, but this behaviour does not usually appear till three years of age or later, after the child has seen others clap and has learned to clap himself.

The more intense the joyous experience usually the more explosive is the laughter in response to it. Smiles are generally responses to mildly pleasant experiences. They may, however, be expressive of a mixed emotional state in which there are alternations of fear and delight. In other words, a smile may be an inhibited laugh. The timid new child only smiles when he is pleased and does not burst into laughter until later in his school experience when he feels more secure and confident. There are differences among children with regard to smiles and laughter. Some children seem to be always more or less inhibited and give only very fleeting smiles or laughs, though their general attitude shows that they are intensely interested in certain events. Other children who are solemn and who seldom laugh or smile do not seem to be so much inhibited as matter-of-fact. They take things and events very much for granted and show little concern one way or the other. Then there are children who smile often but who seldom laugh, and there are hilarious youngsters who laugh at the least provocation.

With regard to the scoring, a child who has laughed at his own actions, such as patting the snow or jumping up and down, scores on item one. If he has run about or skipped spontaneously for no particular purpose he scores on number two. See Figure 44 for an example. Almost all children run about for fun occasionally, but a few children sit or stand about making as few unnecessary moves as possible. A child who has clapped his hands at sight of a pretty picture or a favourite dessert, at the suggestion of a new game, or in any such pleasing event, scores on item three. Children who have joined readily in active games and have shown eager delight in sleighing or sliding, score on four and five. See Figures 45, 46, 49 and 50 for illustrative examples.

Items 6 and 7. Laughed at loud noise or when chair upset.

After children discover that certain noises, such as the sound of falling blocks or dishes, do not hurt them, they show amusement rather than fear of these events. Very often a child who is farthest away from the noise or catastrophe starts to laugh, and the child who dropped the object or

knocked over the blocks may laugh in imitation after a startled delay. As the children get accustomed to the nursery school routine and develop an interest in the fitness of things, they may laugh at almost any sudden noise which breaks upon a relatively quiet moment. Laughter when blocks upset is common under three years of age, but laughter at strange noises is more characteristic of four-year-olds. They have more knowledge of noises and they feel more secure in the nursery school environment. The child who has laughed at a sudden or loud noise scores on item six.

In the same way, when children discover they are not hurt by a fall from their chairs they may laugh at the absurdity of the situation. Again, another child who is secure on his chair may laugh at the one whose chair has upset, and the startled child may laugh with him by force of suggestion. A child may also laugh spontaneously when his own chair upsets. A point is scored on item seven by the child who laughs spontaneously when a chair is upset whether it be his own or that of some one else.

Items 8 to 13 inclusive.

There is no doubt, judging from children's behaviour, that for them at least "laughter is more infectious than tears". It is only the very occasional child who cries in sympathy with another child, but almost all children smile and laugh in imitation of others. The smile perhaps is a little more common than the laugh. Two-year-olds mostly smile at the laughter or smiles of others, though occasionally they may laugh in imitation. Three-year-olds laugh readily in imitation of others, and they may even laugh to cause others to laugh. They enjoy being able to cause such a pleasing effect. Children of three and a half years and over not only laugh to cause others to laugh, but they also make noises and grimaces and talk nonsense to cause laughter. This behaviour is referred to under item forty-two in part B of the scale. The younger children are often the audience for these older ones, as they laugh readily at peculiar faces and noises made by a child. Any one who has laughed when others laughed or made peculiar faces or noises, or who has laughed to cause another to laugh, scores on item 8, 9, or 10.

Amusement over grimaces is one evidence of delight in absurdities. Children soon notice when things are not just

as usual and take delight in their own discovery. Both at home and at school pre-school children are learning to do things correctly, and they take more and more interest in the correctness of their own performances. A young child will laugh at his own mistake in some simple task or occupation, if the mistake is not a serious one and likely to cause trouble. He laughs at his own mistakes before he has developed sufficient interest in the doings of other children to be concerned over their errors. Later he may laugh more at others' mistakes than at his own, as he gets an additional feeling of power and superiority when the other child makes a mistake. Some children develop such intensely keen interest in right behaviour that they are hasty and annoyed rather than amused by their own mistakes. In the same way, they are so anxious to correct others' mistakes that they do not laugh over the little absurdities. A child who has laughed at his own or another's mistake scores on item eleven or twelve.

There are many other kinds of incongruity and absurdity which strike the pre-school child as amusing. A child may smile, laugh or call attention to absurdities, such as a chair standing on the table, a coat turned inside out, or a cap pulled down over the child's eyes. Unusual events may amuse children and cause them to laugh, as when the teacher has hiccoughs or falls down, when a strange dog walks into school, or when the snow slides off the roof. Occasionally children are amused at absurdities in stories, although at the pre-school age they usually listen in rapt attention, taking everything very much for granted. Children are generally older when they laugh spontaneously at jokes in stories. Pre-school children laugh, however, at the suggestion of the teacher who is telling the story. Any child who has laughed at an unusual event or at some little absurdity scores on item thirteen. See Figures 43 and 48 for illustrations.

Items 14, 15 and 16.

One very important form of delight which may be classed as a separate emotion at the adult level is elation due to self-confidence, assertion, display or other gratification of the ego instinct. The emotional behaviour attending elation due to self-satisfaction is only a special instance of delight at the pre-school level. Success in achievement is often a thrilling experience. Children sometimes even jump up and down with

delight when they have completed a task satisfactorily. But more often they just smile or shout out to nobody in particular such remarks as, "I got it in", "That's right", "ee-ee", or "I finished". A child who has shown pleasure in his own success by smiling or exclaiming with delight scores a point on item fourteen. The little boy who is smiling in Figure 47 is pleased at his own achievement.

Another way in which a child shows pleasure in his own efforts or at his achievement in some little task, is by calling some one's attention to it or exhibiting it for approval. Children often take their drawings, tracings and plasticine models around for others to admire, or call attention to them, saying, "Look what I made". Any child who has thus displayed or called attention to his work scores on item fifteen. A child may also be proud of his own possessions and exhibit them or call attention to them in order to draw the admiration of others. Children who have been given dolls, balls, or other toys for presents often bring them to school to show around. New suits or dresses are often exhibited with pleasure and pride, accompanied by such remarks as, "I got a new suit, it's nice isn't it". A child who has spontaneously exhibited his clothes or possessions scores on item sixteen. It should not be counted if a child only made such display after inquiry or remarks about his possessions by observant children or adults.

17. Sung little tune to self.

Another manifestation of pleasure in sensory experiences or activity is when a child spontaneously hums or sings a little tune to himself. Children often burst into song while engaged in active occupations and also between employments. It is quite common for them to recite what they are doing in an improvised half-sung rhythm. Sometimes they sing rhymes they have been taught and at other times they make up little songs or catches of tune themselves. Any child who has been heard singing to himself while employed or when resting scores on item seventeen. Figure 53 shows a child singing while he digs in the snow.

Items 18, 19 and 20.

There are many different objects which appeal readily to the interests of pre-school children. Among these may be included coloured objects of unusual form, familiar toys which have already brought pleasure, pictures, animals and some-

times flowers. Of course there are individual differences in nature and degree of interest. Some children show very little interest in flowers, while others gather them eagerly or exclaim when they see them. Delight in things is usually shown in ecstatic exclamation, either in the form of a prolonged vowel sound or a loud and eager repetition of the name of the pleasing object. For example, a child may say in reference to a picture, "Oo, there's a bear", or at sight of flowers in the grass, "Dandelions!" or when a cat appears, "There's a pussy!" If any child has exclaimed with delight at pictures, objects, animals, or flowers he scores on the appropriate items 18, 19 or 20. The little boy in Figure 52 is showing delighted interest in the flower.

Items 21 and 22.

Children over two and a half years of age are generally interested in stories and will listen to them eagerly for as long as their attention can stay on the same thing. Two-year-old children only listen attentively to a story for a few seconds or a minute at a time. Children between two and a half and three years of age may attend to a story for two or three minutes, while three-year-olds will listen for five or ten minutes. Four-year-old children will listen quietly to stories without fidgeting for ten minutes or more. A child who has shown sufficient interest and delight in stories to listen to them eagerly for two or three minutes at a time on a number of occasions, without being summoned to attention, scores on item twenty-one. In Figure 55 a group of children are seen listening to a story. Some are more attentive than others.

As already mentioned, pre-school children do not as a rule laugh spontaneously at jokes in stories, but some of them will laugh or smile when the teacher smiles, makes a strange noise, or asks them if that isn't funny. Any child who laughs at an adult's suggestion when listening to a story scores on item twenty-two.

Items 23, 24 and 25.

Smiling is by far the most common expression of pleasure and delight in the nursery school. Children often smile at their companions and at adults with whom they are familiar. Some even smile readily at strangers. Most children smile back in response to a smile, particularly the younger ones who are still at the imitative stage of behaviour.

Certain children are always quicker than others to see an absurdity in a situation and to laugh or smile at it. They may smile or laugh if their napkins fall on the floor, if they discover their books are upside down, if the wind blows the door shut, and so forth. Occasionally such children will recognize absurdities in stories and will smile or laugh at impossibilities like the following: "—and the mummy-pig spanked the naughty little pig, and the naughty little pig cried 'Eek, eek, don't spank me any more, I'll be a good little pig'". Any child who has smiled at humorous situations or stories, who has smiled at others or in response to a smile, scores a point on items 23, 24 or 25. See Figures 48, 51 and 54 for illustrative examples.

Items 26 to 33 inclusive.

Delight also manifests itself in affectionate behaviour, although the latter contains certain elements, such as kissing and hugging, which are not common in other forms of delight. On this account, perhaps, affection should be considered as an emotion already distinct from general delight at the pre-school level. It has, however, many elements in common with delight, demonstrations of pleasure in certain sensory and imaginary experiences and in self-expression. Children smile and approach those who bring them pleasure. They sit close beside children or adults who show interest in them, or from whom they expect attention. They embrace their parents or guardians who minister to their needs and comfort them in distress, and sometimes they extend such affectionate embraces to teachers and other staff members. It is a noticeable fact that children are more likely to go to adults to be petted on the days when they are tired or not feeling well, or after some distressing experience, than when they are well and happy in their activities. Possibly this represents an attempt on the part of the child's organism to seek a balance of autonomic functioning, to stimulate the parasympathetic and thus counterbalance the activity of the sympathetic nervous system. Or, in psychological terms, the child is seeking pleasure to dispel misery and discomfort.

Some children frequently embrace others at school or kiss them spontaneously. In most cases it is the older children who show their interest and affection in this way, particularly to the babies; but playmates at any pre-school age may hug

one another in happy friendliness. The younger children who are still afraid of the others or of the strange adults often show affectionate behaviour for inanimate things like stuffed animals or dolls. Even older children may hug and cherish dolls, though their play with them is more often dramatic. They are too busy acting the part of doctor, nurse, mother or father to hug the doll very long.

Any child who has shown affection for another child by sitting close beside him scores on item twenty-six. If he has shown his affection in the form of hugs or embraces, he scores on number thirty; and if he has spontaneously kissed another child, he scores on thirty-two. See Figures 57 and 58 for illustrations. The child who has shown affection by embracing his guardian on the latter's arrival at school to fetch him home scores on item twenty-nine. And the child who has embraced an adult other than his guardian, such as the teacher, scores on thirty-one. If a youngster has gone to stand close beside a familiar adult or sit beside her, he scores on item twenty-seven; and if he has behaved in the same way towards a stranger, he scores on twenty-eight. Lastly, if a child has carried about a treasured doll or stuffed animal, if he has sat rocking it or has hugged or kissed it, he gains a point on number thirty-three. See Figures 49, 58 and 59 for illustrations.

Part B (Supplement to A for Age 3½ to 5 Years)

34. *Skipped joyfully from one occupation to another.*

Children show spontaneous delight when they skip happily from one occupation to another—their nervous energy is being liberated and expressed through pleasing channels. Usually only children over three and a half years actually skip with delight—the younger children either run or jump. They have not yet acquired the additional motor skill required for hopping on one foot after the other, as in the skipping movement. If a child has skipped with a smiling or pleasant expression on his face from one occupation to another, he scores on this item.

Items 35 and 36.

The little ones under three years may sing little tunes to themselves, but they do not join readily in group singing. They are more interested in watching the others, and only

reluctantly respond to the teacher's encouragement to join in. By the time they are three and a half years of age most children join readily in group singing and show delight in doing so by their eagerness and smiles. A few children still remain shy and make little attempt to express themselves in this way. If a child has usually joined in group singing, with only two or three exceptions depending largely upon the number of opportunities, he gains a point on item thirty-five. Some children enjoy singing and certain games so much that they ask for their various preferences, as for example in the request, "Can we have Jack and Jill to-day?" If a child has asked for certain games or songs he scores on item thirty-six. The special preferences may be entered in the space provided.

Items 37, 38 and 39.

Children ask to be given the things they like, just as they complain of their dislikes to have them removed. It is, however, more common for the older children to anticipate the things they want and to ask for them than it is for the younger children. In schools where waiting on table is a privilege allowed only to those over three and a half years, asking to be chosen to wait on table is a sign of a particular preference or like among the older children. If this privilege is extended to all the pre-school children, then asking to be waiter may be a mark of interest and pleasure for younger children as well. A child who has asked to be chosen to wait on table scores on item thirty-seven.

Children who have enjoyed doing tests in the mental examining room may show their pleasure and interest by asking to be taken to play with the toys again. Such behaviour would score on item thirty-eight. Children show their preferences and likes for certain foods often by exclamations, such as "Oo, goodie", or "I see chocolate dessert". If any child has exclaimed in this way and welcomed certain foods he scores on number thirty-nine. His special preferences may be recorded below this item.

Items 40, 41 and 42.

Children also find pleasure in the satisfaction of their social interests. After they are three and a half years of age they often develop sufficient interest in others to appreciate their achievements. Any child who has exclaimed with delight or drawn attention to another child's work in appreciative

interest scores on item forty. A child may show interest in another's possessions, the stones he has collected or the toy automobile he has brought to school. He may show this interest in the form of delighted exclamation or a request to see, for example, "That's pretty, aye?" or "Let me see". Behaviour of this kind would gain a point on item forty-one. Moreover, as previously mentioned, a child may delight in bringing pleasure to others and in "making a social hit". He may laugh or perform absurd antics or talk nonsense to cause others amusement and make them laugh. Incidentally he gets attention, approval and appreciation, and a sense of power in being able to cause such an effect. Any child who has talked nonsense to make others laugh scores on item forty-two.

Items 43, 44 and 45.

The older children in the group, both boys and girls alike, apparently derive considerable pleasure from caressing and helping the babies. They want to hug, kiss or nurse them, or hold their hands. Sometimes they ask permission or choose to sit beside one of the babies instead of beside their usual playmates. They also ask or elect to take care of them, offering help with their little duties like undressing, placing table napkins up to their necks, and so forth. The older children seem to feel important and secure in their superior abilities, and are drawn towards the little ones who give them this opportunity for favourable comparison and general self-expression. They feel themselves into the envied position of their parents and delight in acting accordingly. See illustration in Figure 56.

The more usual altruistic interpretation of such behaviour is not stressed here, because there are evidences that the maternal behaviour under consideration is generally more pleasing to the older child than to the younger one receiving attention. The older children are often so anxious to have everything right and to do things correctly for the little ones that they hamper their movements and cause them considerable discomfort. The older children also find pleasure in "babying" the little ones and lifting them about, to the extreme discomfort of the latter. It often happens that adults have to come to the rescue of the babies who are being so excessively mothered by the older ones that they are tearful

or angry at the discomfort and interference with their liberties. Of course it may be true that the older child is trying to help and please the little one, although through inexperience he makes wrong moves and is unsuccessful at times. On the other hand, he is also deriving great pleasure for himself, whence comes the greater part of his delight in such behaviour. Any child who held the hand of one of the babies in group play scores on item forty-three. And one who has asked permission or chosen to sit beside or take care of a smaller child scores on item forty-four or forty-five.

CHAPTER XII

EXCITEMENT AND ENURESIS

THE excitement shown by children in the nursery school is usually delighted excitement, and is generally produced by excessive stimulation of a pleasing kind. This may be stimulation of many sense organs at once under conditions which do not impede response. It may come through muscle and other kinesthetic stimulation due to pleasing activity. It may also be largely due to stimulation of the imagination through association of the present conditions or suggestions, with intensely pleasant experiences of the past. Delighted excitement may be due to sudden release of tension and inhibition and the setting free of some strong drive or interest; and it may be due to stimulation and promised satisfaction of keen interests, desires or instincts. Distressed excitement is due in part to the above situations and in part to shock, to sudden call for new adjustment or to fear associations. Excitement may come suddenly as in delighted or distressing surprise, or it may come more gradually with continual increase in pleasant or unpleasant stimulation.

Sudden release from tension or presentation of a new and pleasing situation often produces something in the nature of a shock. The children sit or stand paralysed for the moment, breathing is often checked and there are two or three seconds of complete silence. Usually the older or the more impulsive children are the first to respond actively in some particular direction, either by bursting into laughter, by exclaiming "oo", or by clapping, jumping or running towards the cause of the excitement. Such behaviour has been repeatedly witnessed when a group of pre-school children were introduced unexpectedly to an illuminated Christmas tree covered with presents.

It apparently takes a second or two for the children to realize that the new situation is a safe and highly desirable

one. They then have so many impulses stimulated which demand immediate satisfaction that one inhibits the other. Thus, in sudden excitement, there is a reaction akin to fear at sudden shock. This reaction is followed up by responses of delight to the satisfying elements in the experience, or by distress if the unpleasant and unsatisfying elements predominate. Disagreeable shock is usually followed by tears, while a sudden and enjoyable thrill is usually followed by laughter.

Children vary among one another and from time to time in their expressions of excitement. The most common manifestations among three- and four-year-old children are : raising of the voice both in loudness and pitch as in shouting and squealing, spasmodic outbursts of laughter or continuous laughter as in giggling, increased general activity as in jumping or running about, and increased speed shown in hastiness and carelessness with occupation. There may also be enuresis or frequent requests to go to the toilet, and the child's face often becomes flushed.

A few children, particularly the younger ones, show excitement in a different way. There is cessation of movement and they remain stiff and speechless. They may turn pale or appear flushed like the others. They are usually very solemn and may tremble and even burst into tears. Such children often lose their appetites as a result of excitement. Among the children who rush about actively some may lose their appetites and in extreme cases they may vomit, others develop increased appetites and still others eat and digest their meals as usual. Most children become warm with excitement and a few may develop body temperatures slightly above normal, while an occasional child may become cold and shivery. Perspiration is also a fairly common accompaniment of excitement.

There is a little age difference apparent in the excited behaviour of pre-school children, although three- and four-year-olds behave much alike. The behaviour of the latter is characterized by somewhat random and disorganized movements tending in general to approach or to prolong the cause of the excitement rather than to avoid or put an end to it, as in fear and anger. Where there is fear or distress mixed with delight in excitement, there is hesitance and vacillation in movement. The younger children smile and laugh spasmodically, while the older ones giggle frequently in excitement.

The latter are also rougher and noisier than the former, due mainly to their greater strength and vocal capacity.

Both younger and older children may show the restrained kind of behaviour in excitement, though it is more characteristic of the two-year-olds in the nursery school. This is no doubt because situations in school are newer for the little ones; they feel less secure and they are more susceptible to fright. The noise and roughness of other children overwhelms and startles them and causes more distress than delight. Small children sometimes cry and laugh alternately in stirring situations, as in rollicking games when others are noisy or boisterous.

It would appear that excitement is a mixed emotion containing elements of fear or distress and elements of intense joy or delight. In some cases of excitement, if there is any impediment to movement or self-expression, anger may be mixed with delight. The many impulses aroused in excitement may conflict with one another and result in suppressed agitation, such as may occur in fear or anger. In cases where excitement is due to release from tension and liberation of a long unsatisfied drive there may be both pleasant and unpleasant elements in the experience.

The dominant tone, however, is usually pleasant since there is promised or actual fulfilment of intense desires and drives. If there is only promise of or delay in the satisfaction of these desires, the experience is as much one of fearful agitation as it is of anticipated enjoyment. Children who express their excitement in the form of speechless tension, pallor and solemnity, or faint smiles instead of hilarious laughter, are probably experiencing more fear and distress than pleasure. They may be apprehensive of the new situation, self-conscious and lacking confidence in their ability to show off to the onlookers, angry at the attention given to another child instead of themselves, or still inhibited as a result of the preliminary shock of surprise. Some children recover from shock much more rapidly than others.

Physiologically it appears as if both sympathetic and parasympathetic branches of the autonomic nervous system are hyperactive in excitement. There is possibly alternation of hyperactivity. As the situation changes, first one and then the other system may be predominantly active.

Among the evidences of this disturbance of autonomic

functioning in excitement are enuresis and diarrhœa. The former is included in the scale and is discussed below. The latter was found to occur so rarely in school that it was omitted from the Emotional Development Scale. The few occurrences could usually be attributed to causes other than excitement.

Enuresis may be an outcome of excitement or other emotion of the moment and it may have other causes. It is due immediately to lack of control over the bladder sphincters, to sudden contraction of the bladder walls, or to excessive secretion of urine and consequent increased stimulation of the bladder evacuation reflexes. There may be local irritation, acidity and other causes of reflex bladder evacuation, but enuresis in school has often more complex and perhaps emotional causes. Children who are slower than others in developing bladder control may be thus retarded because of greater emotional susceptibility as well as inadequate training and in some cases perhaps a poor general learning capacity.

Relaxed sphincters and bladder contraction may result from excitement or from preoccupation with some pleasing activity, due in the former case to the action of the autonomic nerves upon the bladder and in the latter to the lapse of voluntary control through lack of attention. Increased secretion of urine may be the result of fear, anger or distress as well as of excitement, because in all these emotions there is stimulation more particularly of the sympathetic branch of the autonomic nervous system. Increased secretion may also be due to cold, and relaxation of the sphincters may be partly due to warmth, because of the action of temperature upon the autonomic nervous system. Children may need to urinate while outdoors in the cold, but they do not realize the fact until they enter the warm school. Enuresis may then occur, or the children may find difficulty in controlling urination until they reach the "toilet". Ill-health may be a factor in reduced bladder control, partly because of diminution in normal voluntary control and partly because of increased emotional susceptibility.

Some children show much greater bladder control than others. This may be in part a result of training and in part due to emotional factors. Certain children are less excitable than others and some, though emotional or excitable, express their excitement in inhibition rather than in facilitation of certain responses. New children, who are fearful or excited

by the many fresh interests at school on the first day, sometimes find difficulty in urinating although they need to do so. The bladder sphincters are tightened as a result of emotional (sympathetic autonomic) tension. Other children lose control of the bladder evacuation reflexes and wet their clothes.

Some children in the nursery school require to urinate several times in the morning in addition to the times when the whole group is taken to the toilet. (The latter routine event occurs at intervals of an hour for Group A and about an hour and a quarter or longer for Group B.) Such children possibly drink more than others or may have been poorly trained. But, more often they are excitable, and have poor control or secrete more urine on this account. Enuresis is a much more frequent occurrence in Group A, the children under three and a half years, than in Group B, the older children.

In the following paragraphs the items in Section V are discussed and the method of scoring indicated. The first ten items refer to different situations in which enuresis occurs at school. The other items refer to certain general situations productive of excitement and to different ways in which this emotion may be expressed.

SECTION V

(Age 2 to 5 Years)

Items 1 to 10 inclusive.

Since enuresis may have so many causes, it was considered insufficient to record only whether or not enuresis occurred, without reference to the specific situation in which it occurred. Some of the more important situations from the point of view of emotional factors in enuresis are isolated and mentioned in the first ten items. Further differentiation would really be desirable, if a thorough study of the causes of enuresis were to be made. It was thought, however, that ten items of this scale were enough to devote to behaviour which is only occasionally or partly determined by emotion. These items are further considered below under separate headings.

1. Not wet clothes outdoors.

A child may wet his clothes at any time because of inadequate training in control. He may also wet them outdoors

because he is too interested and excited in active play to notice that he needs to go to urinate. He may further be unwilling to interrupt his pleasurable activities for such a nuisance as going to the toilet. He may be highly sensitive to cold and lose his control or secrete urine excessively on this account. He may also, of course, have failed to go to the toilet when he was told to do so at the appointed time.

In the case of very new children, they may not know how to make the teacher understand what they want, or they may be too fearful and shy. They very soon become adjusted to the school situation and learn how to let the teacher know their needs. It is usually difficult to determine what are the specific causes of any particular case of enuresis. For the purpose of scoring the first item of the section, however, such discovery and inference is not necessary. A child gains a point on the item if he has not wet his clothes outdoors, and he loses a point if he has done so no matter what the specific cause. Further differentiation is made with regard to enuresis indoors.

Items 2 and 3.

Children may wet their clothes indoors when they are unoccupied. Again the cause in a few cases may be the fact that the children are too shy or do not know how to let the teacher know their needs. Their toilet habits are not yet conditioned to the school situation and to the teacher. They are, however, more likely to be too interested in watching what is going on, or too loath to leave the group, to go to urinate. Some children wet themselves indoors when there are visitors present. These visitors introduce a new element into the situation, which may inhibit the child's movements. He may be too afraid or too interested and preoccupied to go to the toilet. If any child has wet his clothes indoors when he was unoccupied or when visitors were present, he fails to score on item two or three.

Items 4, 9 and 10.

Sometimes children wet their clothes when they are preoccupied in struggling with a difficult task. They may be interested and anxious to do it correctly, or they may be angry with the task or the person who presented it. The anxiety over the difficult task may also be determined in part by fear of failure. Children who are under three years

of age may wet themselves for the above reasons in the mental examining room, especially if the precaution has not been made to take them to the toilet first. Older children may find it necessary to go to the toilet during a mental examination for the same reason, but they usually ask to go instead of wetting their clothes.

Children may also require to urinate during a physical examination. This is perhaps due to fear and apprehension, to excited interest or to cool air on the naked body. In the case of physical examination the children are always taken to the toilet beforehand for the sake of uniformity in conditions of measuring weight. Any child who has wet his clothes indoors while struggling with a difficult task loses a point on item four ; and children who have required to go to the toilet during mental or physical examination lose points on item nine or ten.

5. *Not wet clothes indoors during interesting occupation.*

As already mentioned children may wet their clothes while they are engaged in an interesting occupation. They may also defer going to the toilet because of interest and preoccupation. They may then wet themselves on the way to the toilet, because they are unable to control urination any longer. A child who has wet his clothes while interestedly employed indoors, or while on the way to the toilet after tardy interruption of a pleasant occupation, fails to score on item five.

6. *Not wet clothes with excitement over special event.*

Excitement in anticipation of a novel or familiar pleasurable event may also cause enuresis. Anticipated parties, the promise of new and interesting lessons, games or stories, and the knowledge of proposed parents' visits may be factors in causing enuresis. Moreover, excitement may occur along with a special event and may persist after it is over. Thus enuresis as a manifestation of excitement may occur either before, during or after an event. It is usually only the younger children under three years of age who wet their clothes on such occasions. The older ones generally ask to go to the toilet, although they too may lose control as a result of excitement to such an extent as to wet themselves. Any child who has wet his clothes before, during or after a special event fails to score on item six. Further discussion of excitement in relation to the special event will be found below in connection with items twenty-one to thirty-one.

7. *Not wet bed at nap-time.*

Wetting the bed at nap-time may be entirely due to incomplete training in bladder control and toilet habits, especially in the case of two-year-olds. It may also be emotionally determined by the excitement of being in a room with others, by disturbing or exciting dreams, and by fear of the new situation. Relaxation of sphincter control may sometimes be determined by the warm comfort of lying in bed; also a child may hate to leave his comfortable position to go to the toilet. Any child who has wet his bed at nap-time, regardless of the specific causes, fails to score on item seven.

8. *Not asked to go to the toilet at intervals of less than an hour.*

Children who have well-established toilet habits ask to leave the room instead of wetting their clothes. This is the general rule for children over three years of age. Such children may manifest increased excitement or excitable temperaments by frequent requests to go to the toilet. There may, of course, be other causes for frequent need to urinate, such as training for short intervals of control only, but emotional factors may also be present.

Pre-school children, including two-year-olds, do not ordinarily require to urinate at intervals of less than an hour. The two- and three-year-old children are usually taken to the toilet in one-hour intervals, and the four-year-olds in one and a quarter-hour intervals, although most of them could control urination for longer periods than these. It is therefore unusual for a child to need to urinate at shorter intervals. Thus if anyone has asked to go to the toilet several times in intervals of less than an hour, he loses a point on item eight. It should also be noticed whether this is a daily occurrence or whether it occurs only on certain occasions. Note should be made of these occasions if it is desired to make an inquiry into the causes of the frequent urination.

Sometimes when children get bored with their work and are anxious for a little activity they ask to leave the room by way of diversion, although they do not need to go. Other children may then ask to go to the toilet as a result of suggestion, to be in the fashion, or also for diversion. A real need can usually be distinguished by the length of time since last urination, by the relative activity or tranquillity of the intervening occupations, and by the obvious discomfort or comfort of the

child. Children who need to urinate become increasingly fidgety, unable to concentrate, hasty, fretful or irritable.

Older children will usually accept the remark of the teacher that it is only a short time since they went to the toilet and that they do not need to go again, if such is really the case. They then apply themselves again happily to their work or play. Those who really feel a need will protest and show other signs that they require to go. Sometimes children, especially older ones, do not urinate when they are sent to the toilet at the usual time. They may be too anxious to be back first to take the time, or they may play instead. In scoring the above item, therefore, it is desirable to make sure of the actual interval between urination, and to distinguish between the real need and the desire for diversion. Asking to go to the toilet merely for diversion should not be counted.

Items 11 to 20 inclusive.

One of the most frequent causes of excitement in the nursery school is noise or activity of other children. Noise is disturbing and startling. It interferes with quiet concentration upon an occupation or with any systematic play activities. It also offers the suggestion for free vocalization, an instinctive play activity, on the part of the hearer. Noise may therefore at the same time be disturbing and pleasantly stimulating. Further, the presence of a group of children is pleasantly stimulating both to social interests and to assertive tendencies; it may offer an opportunity to show off. Activities of other children, moreover, may suggest and stimulate many pleasant actions either through immediate perception or through association. The general freedom of behaviour of the other children suggests license and a release from social or adult-imposed regulations. Thus the whole situation is highly stimulating, offering opportunity for the expression of many drives and partly satisfied desires. The emotions aroused may be excessive delight or joy, a little fear at the noise and unpredictability of the behaviour of the others, fear and anxiety also lest the teacher should disapprove, and a little anger at the interference or assertion of others.

Items 11, 12 and 13.

The behaviour resulting from excitement caused by a group of children is partly determined by the nature of the drives and instincts released, partly by the particular suggestive

behaviour of the other children at the moment, and partly by the physical condition and the emotional type of the child concerned. Very young children, new-comers to the school, and sick or timid children may be so startled by the noise and activity of others that they burst into tears, cringe, draw away, or just remain stiff and speechless. Those who have behaved in such manner in response to the excitement of other children fail to score on items 11, 12 or 13.

Items 16 and 17.

The more common reactions to a stirring and pleasing social situation are described in items fourteen to twenty. These include raised pitch and loudness of voice, as in shrieking and shouting. Laughter and giggling are also frequent expressions of excitement. Giggling is really continued laughter for seconds or minutes after the provoking cause, and is usually out of all proportion to the amusement normally caused by such an incident. It is in a sense uncontrolled laughter determined rather by emotional reinforcement than by the external situation. Children who have raised their voices or giggled and laughed when excited by their companions fail to score on item sixteen or seventeen. See Figure 60 for an illustrative example.

Items 14, 18 and 19.

Increased general activity is another common manifestation of excitement. In two- and three-year-olds this often takes the form of jumping up and down, waving the arms and sometimes rolling on the floor. Older children frequently rush about, carelessly bumping others or knocking them over. In excitement there is often loss of sympathy and consideration for others and loss of interest and care for materials. The ego is having an orgy of expression, frequently at the expense of other people and material things. The children may knock chairs over, bump or scratch furniture, tear books, break toys, trample on clothes, dolls or other properties, and generally leave disorder and destruction in their wake. Any child who has shown excitement by general activity, such as described above, fails to score on the appropriate items 14, 18 or 19. See Figure 60 for an illustration of active excitement.

Items 15 and 20.

Excitement may also be shown in flushing of the face and in hastiness with occupation. The children who show excite-

ment mainly in hastiness rather than in roughness and noisiness are the older ones, those only slightly excited, and those whose social behaviour is more stable and organized than the others'. Children who are highly excited frequently become flushed. In such event they would fail to score on item fifteen. A child who has shown excitement by speeding up in his movements, becoming hasty and careless with his occupation, putting things in the wrong place or leaving them scattered and unfinished, fails to score on item twenty. In Figure 61 a child is seen mopping up the milk he spilled in hasty excitement while others were laughing.

Items 21 to 31 inclusive.

The generic term "special event" is intended to include any events which come as pleasant surprises and which appeal to strong interests or to a number of interests. They may be something new in the experience of the children, or quite familiar but highly pleasing. Such events are: Christmas and birthday parties; visits of parents, photographers, or many strangers; favourite games, stories or lessons introduced as a special treat; and new or unusual games, lessons or stories. The exciting qualities of a special event will depend upon its nature, preceding events, the interests of the individual, and the suggestion of others.

Children can be and often are worked up into a state of excitement by enthusiastic adults concerning events which would move them only slightly, were they left to themselves. Parents and others, who want to be gratified for their trouble by the enthusiasm of the children, often stir up their emotions by leading questions and suggestions of excitement. In the nursery school the same event may be exciting to one child and not to another, because there are differences in their interests, previous experiences and physiological and other conditions. One child may be well and another unwell, one child may be in the limelight and the other unnoticed, and so forth.

If the children know that the event is coming or if they are promised some special treat, they may show excitement beforehand due to anticipation. They may also show excitement during the event or after it is over. Some children, for instance, show marked excitement, irritability or liability to tears on the day after a birthday party or a special trip.

Items 21 to 25 inclusive.

Excitement over a special and pleasing event usually manifests itself in very much the same way as excitement due to noisy companions, described in connection with items eleven to twenty. The nature of excited behaviour in school depends in part on the nature of the event, the degree of its appeal and the amount of liberty allowed the children by the teacher. In the case of very stirring events and when the children are allowed to move about and do largely as they please, there may be shouting, giggling, laughter, and noisy, rough activity. When the event is less exciting or when the children are under stricter control, raised voices, smiles, laughter, and hastiness or carelessness with occupation may be the chief manifestations of excitement. Items twenty-one to twenty-five cover the above kinds of reaction, and a child would fail to score on any of these items, if he has behaved in the manner described.

Items 26 and 27.

Another manifestation of excitement may be change in facial colour. Usually children become flushed with excitement, but occasionally they grow paler than usual. The lower eyelids may become slightly puffy. The eyes may shine due to reflection from the surface of the eyeball moist with secretions, and also to the raising of the upper eyelids which allows more light to penetrate under the lashes. Sometimes the face is patchy in colour as a result of excitement just as in the case of distress, fear or anger. The cheeks may be flushed, while the lips and around the mouth are paler than usual. On the other hand, the cheeks may be slightly pale, while a flush appears at the sides of the face and down the neck. If a child has become flushed or turned pale with excitement over a special event he loses a point on item twenty-six or twenty-seven. In cases where the face is patchy in colour it is usually the flush that is most noticeable, and this should be scored on item twenty-six.

Items 28 to 31 inclusive.

As previously mentioned, some children, especially the younger ones, show inhibition of action and distress under exciting circumstances rather than increase of activity and delight. They may remain stiff and speechless, or they may tremble as in fear. They may also burst suddenly into tears

for no apparent reason or upon the slightest provocation. Children who behave in any of the above ways either before, during or after some special occasion fail to score on items 29, 30 or 31.

Sometimes a child will lose his appetite and refuse to eat as a result of excitement. In school it may be noticed whether or not the child eats less dinner than usual, when a special event is anticipated, is in progress or just past. If he eats less than usual he fails to score on item twenty-eight. The way in which a particular child manifests excitement may give some clue to his emotional bias which is determined in part by his physical nature and in part by his previous emotional experiences.

The nature of the specific events which cause excitement should be entered in the space provided for this purpose. When a sufficiently large number of such events are recorded, and when these are considered in relation to the form of a particular child's emotional responses, a better understanding may be reached of the specific causes of these reactions.

Items 32 to 36 inclusive.

Visitors may cause considerable disturbance in a nursery school, especially if they laugh or remark upon the children in their hearing or if they actually talk to them. The children may be afraid of the strangers or they may feel restrained by so much adult vigilance. Their attention is drawn from their work or play by the counter-attraction of moving, laughing or talking human beings. Some children who find themselves under observation become self-conscious and perhaps afraid that they will not appear to advantage. They stop their work and often remain stiff and speechless when observers are present. Such children would fail to score on items thirty-five and thirty-six. In Figure 62 may be seen a little boy who is quite undisturbed by observers.

Other children are more delighted by observation. They soon discover they have an appreciative audience before whom to show off. They may discover too that the teacher is also distracted by the visitors and more lax than usual in her discipline. As a result they may show boisterous uncontrolled activity and hilarious excitement. These children would fail to score on items thirty-two and thirty-three.

Occasionally a child will be so disturbed as a result of obser-

vation at meal-time that he does not eat his usual amount of dinner. This occurs generally in the case of children who have shown feeding difficulties before. Those who have eaten less dinner than usual when observers were present fail to score on item thirty-four.

Items 37 and 38.

Children occasionally show marked excitement over their own success. This usually occurs only when the success comes at the end of a long and tedious or exacting struggle. It is a relief from effort and tension, a highly pleasing experience following upon an uncomfortable one. The child may also have a strong ego drive, the satisfaction of which brings intense pleasure. He may on the other hand be a very excitable child, given to emotional excitement upon slight cause. Excited elation may be manifested by noisy ejaculations, by frantic movements of jumping up and down, by waving of arms or of the completed object, or by all of these together. If a child has behaved in such manner, as a result of his own success in some task or occupation, he loses a point on item thirty-seven.

Interest in play materials may be so great as to cause excitement in a child. New children are often positively excited with interest in the different toys at school on the first few days. Other children may show similar excitement on return to school after a vacation or long absence, or when new toys are added to the play-room equipment. They may show their excitement by hurrying through one occupation after the other. They scarcely take time to complete each, to fit lids on the boxes, or to put away toys correctly. They show a frenzied desire to try everything rather than to sit down and play or work systematically at one occupation. As the toys become more familiar such children begin to show preferences and less general interest and excitement. Some children show keen and excited interest in one particular occupation even from the first day of school. These gradually lose their fixed interests and turn to other things after a while. Children who have shown excited interest in materials by hurrying through one occupation after another fail to score on item thirty-eight. This is perhaps evidence of more general excitement than the keen and specific interest just mentioned.

Items 39 and 40.

Some children show rapid emotional changes—they are distressed one moment and hilarious another. They are irritable and easily annoyed during part of the day and cheerful or excited during another part, although there is no apparent change in the total situation which would account for such marked changes in emotional attitude. It seems as if slight disturbances due to environmental factors are augmented by internally determined emotion and result in a more or less prolonged mood.

The same children perhaps, or other children, may show like emotional changes from day to day or over longer periods of time. For days they may be solemn and even tearful and on other days they may laugh and run about boisterously, although school conditions appear to remain much the same. Of course there may be situational factors unknown to the examiner to account for such behaviour. These factors may be in school or home conditions, or in the physical condition of the child. Only variations in emotional attitude which occur more than once and whose causes are somewhat obscure are to be considered in connection with the above items. A child who has varied from hilarious excitement to depressed or irritable behaviour in the same day would fail to score on item thirty-nine. If similar changes in emotional behaviour have occurred from day to day he would fail to score on item forty. Such behaviour is cyclothymic in nature and may play a rôle in later emotional and personality development.

CHAPTER XIII

MANNERISMS AND SPEECH ANOMALIES

MANNERISMS are habitual and automatic actions which take place usually in addition to the main activity of a person and apart from his attentive consciousness. They may be relatively simple actions, such as blinking, twitching and other tics; or they may be more complex movements, as twisting the fingers or springing up and down. Such little actions on the part of children and even of adults may indicate an incomplete learning process. In the performance of a task requiring skill—for example, threading beads—the pre-school child has not yet eliminated all the superfluous movements which he made in his early trials at the task. As he pokes the needle into the hole, his mouth may open, his tongue may protrude, and his feet may push forward so that he almost slips off his chair. These and other auxiliary movements are either original or very early acquired, and they recur readily in almost any situation. It takes a long time for a child to learn to control the inappropriate movements and to perform only those required in a given task.

The persistence of these irrelevant movements depends in part upon the recurrence of aspects of the original situations in which they occurred, in part upon emotional accompaniment and reinforcement, and in some cases perhaps upon deficient learning capacity and adaptability. A child who has many colds may pick his nose frequently even when busily employed. If he is constantly told not to do this by adults he may preserve the habit to draw their attention, to assert himself, or to revenge scoldings and punishments. In each case he obtains relief and self-satisfaction and therefore pleasure in continuing the habit.

Mannerisms, moreover, tend to appear on certain occasions rather than on others. They occur in moments of strain, when there is a conflict of impulses and the dammed-back

energy finds outlet in these old behaviour patterns. Such is the case when a child is concentrating on some difficult task, making incipient trials and checking irrelevant movements in order to perform the task quickly and correctly. The same thing occurs when a child is in doubt as to action—uncertain, for instance, whether it will be more fun to join the others or talk to the teacher. If the conflicting impulses are determined by keen interests and strong instinctive drives, they may arouse emotion and more nervous energy, and this also may find outlet in mannerisms and other dissociated acts. Thus mental conflict, deep thought and concentration, and emotional tension may all be accompanied by nervous mannerisms.

Further, if a child has one or more unsatisfied drives or biological needs, he may exhibit mannerisms. The child may be hungry, he may be lonesome for companions or for attention and affection, he may be tired and sleepy, or he may need to go to the toilet. These stimulated drives when unsatisfied find some relief in little automatic actions, such as tics or early acquired rhythmical activity. When children are tired and hungry before dinner, they may pick their noses, rock to and fro, jump up and down, swing their legs, or suck their fingers and thumbs.

Lastly, any emotional disturbance or excitement may be accompanied by mannerisms. These may relieve emotional tensions; and, in the case of certain mannerisms, such as thumb-sucking and genital manipulation, they may induce emotional activity of an opposite nature which quickly restores normal equilibrium and tranquillity. A child may exhibit mannerisms when he is disappointed after failure in a task, when he is distressed because of discomfort, when he has been startled or hurt, when he is annoyed, fearful or shy, and even when excited. Excitement usually, however, finds almost immediate outlet in some relevant behaviour, and mannerisms only appear when there is great conflict of impulses. Nervous habits therefore have at least a partial emotional significance. Emotion may play a part in their very existence as habits, and their occurrence on specific occasions may be determined by emotional factors in the situation.

All children have a few such mannerisms, though some have more than others. Moreover, certain mannerisms are more common than others. Olson made a study of nervous habits in pre-school and older children and reported their relative

frequency.¹ He grouped the tics under nine main headings, and showed that in pre-school children oral and nasal habits (thumb-sucking, nail-biting, nose-picking, etc.) are by far the most common. Next to these come manual, hirsute and aural habits (picking fingers, pulling hair or ears, etc.). Then come scratching, rubbing eyes or blinking, genital manipulation, and facial twitching or grimacing. The writer's less exact observations agree very much with this order, except that grimacing should perhaps have a higher place in respect to frequency of occurrence.

Some of these mannerisms have more emotional significance than others, but this will vary with individual children. Holding the mouth open during a difficult task may be just part of the effortful performance. The mouth may open to let in more air to the lungs, which is required for increased muscular activity. Or the mouth may open in incipient speech movements since speech is closely associated with and often accompanies action in the case of the young child. On the other hand, holding the mouth open may be a habit residual upon a number of frights or fearsome experiences, and may recur when the child is apprehensive, shy or startled. The habit may also have been established through opposition to scolding and bothering parents and thus have a partial origin in annoyance. It is therefore difficult to say which mannerisms are emotionally significant. The more common ones are itemized separately in Section VI as if they were all of equal importance for the Emotional Scale.

Thumb-sucking has found considerable prominence of late in the discussions of specialists on child behaviour problems. It seems probable that undue importance has been attached to this as a behaviour problem. In the first place, thumb-sucking is the most common of all childish mannerisms and may be considered a normal rather than an abnormal phenomenon. Secondly, it takes a definite course in development when not interfered with, and appears and disappears as a rule within a limited age period. It develops within the first year, is common during the first and second years, occurs less and less frequently during the third and fourth years, and has almost disappeared by the fifth year. Apparently it per-

¹ W. C. Olson, "Neurotic Tendencies in Children: Criteria, Incidence and Differential Tests". Abstracted in *Psychol. Bull.*, 1928, 25, 190-191.

forms a definite function and is gradually supplanted by more adequate behaviour in the course of development.

Thumb- and finger-sucking occur during moments of stress, when there are unsatisfied drives which are finding no outlet in occupational activity. They occur when there is nothing better to do. A child finds many more adequate ways of satisfying desires as his interests and skills develop and as he becomes more resourceful. Thumb-sucking occurs when children are hungry, tired or sleepy ; it substitutes pleasant for unpleasant experience. It brings comfort and relief from tension, through its association with eating and the consequent stimulation of the parasympathetic branches of the autonomic nervous system. It also, on this account, acts as a solace in disappointment, distress and annoyance. It helps to bring sleep more quickly, and altogether it serves the function of stabilizing emotional equilibrium and helping in the solution of difficult adjustment problems.

As children grow older they become less frightened or annoyed when they are tired ; they know tiredness is a daily occurrence and will pass. They know they can ask for food when they are hungry and help when they are in trouble ; or they know these things will come in due course and they can find something to do in the meantime. Thus the emotional determinants of thumb-sucking gradually disappear. Furthermore, children see that grown-up people do not suck their thumbs, and they imitate their behaviour.

Thumb-sucking may remain as an obstinate habit if, instead of suggesting something else for a child to do, adults only scold and interfere with his freedom, thereby increasing his distress. It may also persist in children who have been so surrounded by comfort, attention and affection that they miss these things when they are away from home or their accustomed guardians. They find difficulty in amusing themselves like other children, and they may resort to thumb-sucking or other pleasing habits for comfort and solace. Lethargic children, weak and delicate children, or backward children who have little resourcefulness or variety in interests and skills may also cling to the thumb-sucking habit.

In Section VI of the Development Scale some of the pre-school children's mannerisms, which were observed by the writer, are itemized in relation to the general conditions which gave rise to them. Both the mannerisms and the conditions

may be of significance from the point of view of emotional development. It was found, however, somewhat impractical to make special reference to the many different mannerisms and to the numerous situations in which each may appear. Also in cases where the mannerism is largely determined by unsatisfied drives or needs, it is often difficult for the external observer to determine just what these needs are. Frequently all that is apparent is that the child is unoccupied at the time. For the purpose of the scale, therefore, only certain obvious conditions and general situations, which give rise to most of the pre-school mannerisms, were selected. One of these conditions is the discovery or anticipation of difficulty in a task, as in a mental examination. The difficult task situation may precipitate emotional reactions or it may stimulate strong drives and effort for solution of the problem. Mannerisms then appear as subsidiary activity.

Another general situation in which mannerisms may occur is when a child is unoccupied. He may be lingering between occupations, or in doubt as to a course of action. There may be unsatisfied drives or conflicting motives present. Mannerisms are also exhibited very often after a child has been reprimanded, when his anger has been aroused, or when he is disappointed. Certain mannerisms may also occur when a child feels he is being observed or when an adult speaks to him. He may be fearful of what the adult is going to say or do, or he may be fearful that he himself is not going to make a good showing. For similar reasons and as accompaniment of effort a child may exhibit mannerisms when he is speaking to an adult. These last-mentioned mannerism-producing conditions imply an emotional attitude towards adults, which may have a short or a long history.

Certain other automatic reactions which are not usually classed as mannerisms are also included in this section of the scale, because they probably have emotional significance. One is stereotyped automatic behaviour of a more complex kind, such as sitting always on the same chair in the same place. In this case considerable distress may be shown if the chair is moved or another child is allowed to sit in it. Secondly, repetition of the same feelingful idea is included, as for example, "I want mummy, mummy's coming, my mummy's coming for me", and so on, addressed to anyone or in answer to any remark, no matter how irrelevant the

topic. Stereotypies and obsessional ideas may not only have an emotional origin but they may play a rôle in later emotional and personality development.

Lastly, certain speech anomalies are included, such as stuttering, whispering, baby-talk, and so forth. These may be the outcome of inadequate training, but they may also be the result of emotional tension, mental conflict, repression, or thrilling self-satisfaction. Accidental mistakes in speech may be preserved because of the amusement they cause adults and the attention and delight they bring. Further reference to some of the emotional causes of speech anomalies is made later in the chapter in connection with this particular group of items. These items only apply to children over three and a half years of age, who are normally able to speak clear and articulate simple sentences. Two-year-olds, who are only just learning to speak, babble and stutter and lall as a common occurrence in their trial and practise vocalizations.

Section VI is admittedly unsatisfactory in a number of ways. It does not isolate sufficiently the situations in which mannerisms occur to allow one to make an analysis of the immediate or remote factors which determine them. However, the simple fact that certain mannerisms occur is important in itself. Further, reference is not made to all the separate nervous habits which may occur in connection with each of the general situations mentioned. Only the ones which commonly occur are itemized separately, except in the case of the difficult task situation. A number of mannerisms are referred to in connection with this situation, as it was noticed that if such habits exist at all they are likely to be exhibited when a task presents some difficulty.

Another drawback to this Section, from the point of view of a more thorough study of mannerisms, is that no provision is made for recording the relative frequency of occurrence of these nervous habits. Such frequency would of course be determined in part by the strength of the habits, and is therefore perhaps of emotional significance. The strength of a habit will be indicated on the scale in some cases by its recurrence in connection with several situations. Another indication will be found in the development records over a period of months. The strong habits will persist and the weak ones will drop out or only appear intermittently.

It was felt when making the scale that, since mannerisms

are merely of partial or indirect significance from the point of view of the study of emotion, only a limited number of items could be allotted to them. If sufficient items were included to allow a detailed study of nervous habits, the scale would be distorted and the more significant items in the Fear, Anger and other sections would not receive their fair value. Nevertheless, mannerisms are of enough importance in the study of emotion to warrant at least general mention in the Development Scale.

As in the case of other emotional behaviour, there are one or two general age differences in mannerisms as well as the many individual differences. Thumb- and finger-sucking, nail-biting, tongue extrusion and possibly nose-picking are exhibited more often by children under three and a half than by those over that age. Larger body movements like rocking, jumping or foot-shaking are also perhaps more common among the younger children. On the other hand, finger movements, such as twisting fingers and clothing, are exhibited more often by older children. Giggling is also a three- or four-year-old mannerism. Body-stiffening and head-bending in self-consciousness may occur at any age, and so may the other mannerisms mentioned in the scale.

SECTION VI

Part A (Age 2 to 5 Years)

1. Not bent head or stiffened body during difficult task.

Items one to fourteen all refer to mannerisms which may appear when a child is confronted with a difficult task. A good place to study such behaviour is in the mental examining room when a child is doing a difficult test. One form of nervous habit which may occur is bending of the head accompanied often by stiffening of the whole body and refusal to go on with the task. Such behaviour is probably determined by fear of failure, dislike of making an effort, annoyance and opposition to the examiner, self-consciousness, or fear of making a poor show. It indicates an antagonistic or fearful relationship with adults. This kind of reaction is more common among children between two and a half and three and a half years of age than among older or younger children. The very little ones are usually more impulsive—they make active protests against a disliked occupation, turn to something else,

or just give up and fidget or run away. The older children verbalize their difficulties, ask for help or put out extra effort in the performance of the task. Any child who has bent his head and reacted in an inhibited way towards a difficult task fails to score a point on item one.

2. Not giggled mirthlessly during difficult task.

Giggling is possibly a compensatory reaction when it occurs in the face of a difficult task. The child may feel tense and uncomfortable because of the effort demanded, he may fear failure, and he may be self-conscious and anxious to do well and win approval. The pent-up energy finds relief in an old giggling habit. There may be nothing absurd in the situation to cause amusement, but laughter may be a relief reaction from a distressing situation. The giggle is usually low and intermittent, accompanied by an anxious wide-open look in the eyes. The face is solemn between these little outbursts, and the giggle lacks the explosive mirthful spontaneity of a real laugh. A child who has giggled mirthlessly when finding a task difficult fails to score on item two.

Items 3, 4 and 5.

The nervous energy evoked by a difficult task or a problematic situation may find outlet in fidgeting, body-wriggling, rocking and foot-shaking. Mannerisms involving such gross movement are fairly common among the younger children under three or three and a half years of age. The rhythmic movements are pleasing, bring a warm glow to the body, and counteract the inhibitory and distressing effect of tension due to blocked impulses in a difficult task. Foot-shaking or tapping are also reminiscent of kicking and stamping in anger. There may be evidences of mild annoyance or old habits revived by an inhibitory and tiresome situation. Children who have wriggled, have rocked their bodies or have swung one or both feet, fail to score on items three, four or five.

6. Not sighed during difficult task.

An occasional child will sigh during a difficult task. These sighs seem to come at resting pauses, when the effort has become too great and the struggle is given up for the moment, or when the child turns from one aspect of the problem to another. Inhibited children who seem to be constantly under a strain, and lethargic children who find great difficulty in putting out

effort are apparently the ones who sigh over their work. The sigh is an increased intake of breath followed by an increased expiration, or it is a sudden relaxation of the chest-expanding mechanism in a momentary relief of tension. It is possibly a physiological adjustment to body needs or a habit resulting from such adjustments in the past and revived through association. Any child who has sighed when confronted with or when working at a difficult task fails to score on item six.

Items 7 and 8.

Holding the mouth open and extruding the tongue are either original movements or very early acquired habits. They form part of the earliest responses, such as sucking, coughing, vocalization and deep breathing. Mouth-opening and tongue extrusion may accompany any strenuous or effortful activity on the part of the young child. Several reasons to account for this have already been given in an earlier part of the chapter. These mannerisms are more common among children under three and a half years of age than among the older ones who have learned to keep their mouths shut and their tongues in while at work. Children who have exhibited these mannerisms while engaged in a difficult task fail to score on item seven or eight. In Figure 63 the little boy on the tricycle is holding his mouth open while learning to ride.

Items 9 and 10.

Lip-biting or sucking and thumb- or finger-sucking are common mannerisms. They probably bear some relation to the well-established eating habits and readily recur largely on that account. They also possibly represent a compensatory reaction on the part of the organism to replace tension and discomfort with pleasure and comfort. Thumb- and finger-sucking have already been discussed in some detail. Children who have exhibited the above mannerisms when finding a task difficult fail to score on items nine and ten.

Items 11 and 12.

Nose-picking is fairly common among pre-school children, especially among the younger ones. It is a habit resulting perhaps from nasal irritation and discomfort due to blocked nasal passages during colds. The nervous energy stimulated by a difficult task, but finding no outlet in satisfactory performance, may result in increased attention to and conscious-

ness of physical discomfort. The child may become aware of local irritation on the skin, in the nose, the bladder, or elsewhere, when his attention is thrown back upon himself in a difficult task. The old habitual responses to such irritation are reactivated and the child scratches himself, picks his nose, wets his clothes, or fidgets and asks to go to the toilet. Nose-picking or scratching during a difficult task would be marked zero on item eleven or twelve.

Items 13 and 14.

Twisting the fingers or garments is a well-known mark of shyness in older children. Three- and four-year-old children also exhibit these mannerisms when they are under a nervous strain. They are learning to use their fingers in many daily performances. This finger- or garment-twisting is a form of easy finger-play which may be an outlet for energy when a task becomes difficult or during pressure of emotion. Shyness, disappointment, anxiety and annoyance, as already mentioned, may be aroused by the difficult task situation, and these emotions may find outlet in the above or other mannerisms. A child who has twisted his fingers or clothing in this situation fails to score on item thirteen.

There are many other mannerisms which may be exhibited by children in the difficult task situation, such as heavy breathing, nodding, nail-biting, and so on. These may be scored on item fourteen and the nature of the mannerisms may be recorded in the space provided below the item. Even if a child has exhibited a number of such mannerisms only one point may be forfeited on this account.

Items 15, 16 and 17.

Some children exhibit mannerisms when they are spoken to by an adult or when they notice they are being observed. Bending the head is the most usual reaction on such occasions, as if the child were seeking cover, security from possibly disagreeable or fearful consequences. The child is timid and apprehensive, self-conscious and perhaps self-critical. He may also be lacking in confidence or ashamed of his conduct. These emotional attitudes aroused by the presence of an adult observer no doubt have their origin in past emotional experiences in relation to adults. The child may have been the subject of too much critical concern and therefore his attention turns readily upon his own experiences and conduct.

He may have had too much scolding and too much or too little praise.

Bending the head is often accompanied by cessation of speech and other action, or by failure to answer the adult's question. The latter may be an obstinate reaction, the result of much coaxing from adults in effort to get the child to talk or repeat little sayings before company. It may also be another evidence of shyness and lack of confidence.

Shaking the head is another mannerism which may occur in the above situation. This nervous habit probably has its origin in early acquired gesture language wherein head-shaking means "no" and nodding means "yes". The child is saying "no, no", in his attitude, meaning possibly that he does not want to speak or to answer the question. If any child has bent his head in silence or shaken his head when observed or spoken to by an adult he fails to score on item fifteen or sixteen. See Figures 54 and 63 for illustrations.

Finger-twisting, foot-shaking, nail-biting, and many other mannerisms may also occur in this situation. These should be scored on item seventeen, and the nature of the particular mannerisms should be recorded in the space provided. Only one zero may be recorded, no matter how many different mannerisms have been observed.

Items 18 and 19.

There are some children who exhibit mannerisms while they are speaking to adults. These are generally, though not always, the same children who show mannerisms when they are spoken to or observed. Again the most common nervous reaction is bending the head, usually accompanied by looking up or sideways at the adult. It is a shy, timid or obstinate reaction similar to those referred to in the last paragraph. If any child has bent his head and at the same time looked up or sideways when speaking to an adult, he fails to score on item eighteen. Other mannerisms exhibited in the same situation may be scored by placing a zero against item nineteen. The nature of these mannerisms should be written in the space provided.

Items 20 to 26 inclusive.

A very general situation in which all children may exhibit mannerisms is when they are unoccupied. Indeed, it is a question whether little habits repeated on such occasions

may be called mannerisms at all, since there is no apparent main activity or direction of attention. Close examination, however, will usually show that the child is thinking about something, day-dreaming, or hesitating in doubt between certain actions. The child may even be tense with emotion resulting from an uncomfortable or disturbing situation. He may be afraid, self-conscious, hungry, tired, sleepy, or needing to go to the toilet or to express his pent-up play impulses. The younger children under three and a half years of age usually suck fingers, thumbs or other objects on such occasions. They may also jump up and down in rhythmic activity. The older children jump about too and make grimaces, a kind of facial muscle play. A few of them suck their fingers.

An occasional child of any pre-school age may manipulate the genitalia when unoccupied or disinterested in an occupation. This is more frequent among boys than girls, perhaps due partly to difference in clothing. Thigh-rubbing may occur on occasion, and this along with genital manipulation may perform a similar function to thumb-sucking. These reactions are probably soothing and comforting in effect. They relieve tension and at the same time provide an easy and pleasant occupation in place of a disinteresting one or none at all. The children who behave in this way are the ones who have diffuse attention or scattered and indefinite interests, or those who have very few interests. Thus the restless children with much undirected energy, the disinterested and the lethargic children seem to be the ones who tend to masturbate. As children develop organized interests in different occupations, and as they take delight in developing their own skills and in rhythmic and other activity, these habits disappear.

Children who have exhibited any of the mannerisms mentioned in items twenty to twenty-five, when they were unoccupied, should be scored zero on the appropriate items. If they exhibited other mannerisms, such as rocking, sighing and so on, they fail to score on item twenty-six. Figure 32 shows a child sucking her thumb for solace when unoccupied and in doubt as to action after an unpleasant event. Figure 64 shows a child picking his nose while he is unoccupied.

Items 27 and 28.

Children commonly exhibit mannerisms when they are scolded or reprimanded for misdeeds. They may be annoyed

because of thwarted activity, or disappointed at their own failure or at the resulting social disfavour. The most common mannerism which appears after reproof is thumb- or finger-sucking. This is no doubt by way of finding solace for hurt feelings. Stuttering, foot-shaking, head-bending, and many other nervous habits may also occur. If a child has exhibited any mannerisms after being reprimanded he fails to score on item twenty-seven. The nature of these mannerisms should be recorded in the provided space.

Regurgitating or even vomiting disliked food is an occasional occurrence in the nursery school. This habit usually has an emotional history. Children, who have found that they could prevail in this way upon sympathetic parents to give them what they liked in place of the less preferred dish, may preserve the regurgitating habit. Also, children may continue such behaviour who have found that it brings special attention, coaxing or sympathy, and perhaps a general family disturbance. They get quite a "kick" out of it in spite of their apparent misery. Other children may regurgitate food as a result of too much scolding and forcing to eat. The average child just leaves what he does not like, or makes complaint about it. Sick children of course may vomit or regurgitate food, but ill-health is usually shown in other ways as well. Such cases should be disregarded in scoring item twenty-eight. Any child who has regurgitated disliked food, although he seemed to be perfectly well, fails to score on this item.

Items 29 and 30.

Even pre-school children may show the beginnings of persistent or obsessional ideas. They may repeat the same idea at intervals throughout the day and on successive days. The form may be slightly changed from time to time, but the underlying thought remains the same. Such an idea is usually very obviously connected with strong personal wishes or dislikes. For example, a child may tell the teacher in the middle of play with dolls, "I don't like spinach. Are we going to have spinach to-day?" Later he may say, "My mother does not like me to have spinach." He may start a conversation with anybody saying, "I think we're going to have spinach to-day. I don't like spinach", and so forth. Another child may continually refer to a favourite relative or maid in almost every conversation. Thus, "I've got a granny at home,

my granny's going to give me a toy engine", "My granny likes me", "My granny says you must not do that, I shall tell my granny of you", "My granny likes us to do this", and so on. If any child has repeatedly expressed a feelingful idea, such as the above, he fails to score on item twenty-nine. The persistent idea should be recorded briefly in the space provided.

Similarly children may show stereotyped behaviour of a more general nature than that ordinarily classed among mannerisms. They may repeatedly approach adults or children, closing their fists and feigning fighting motions. They may go through a regular routine of performance of their own accord on coming in from play. For example, a child may sit always in the same place, start always with the same occupation, do exactly the same things with it, put it back and take out a certain other set of material, all in invariable sequence. He may show little interest in the materials and may work with them automatically, perhaps watching others or day-dreaming all the while with staring eyes.

All children show a certain regularity in their actions and a preference for doing some things always in the same way. This is how they learn their little skills and necessary routine. But the practised observer will notice certain children who are much more stereotyped in their actions than others. Children who have shown marked automatism, carrying on actions apart from their directed attention, or who have shown stereotyped behaviour, such as described above, should fail to score on item thirty. The nature of these stereotypies should be recorded in the space provided.

Part B (Supplement to A for Age 3½ to 5 Years)

Items 31 to 35 inclusive.

Children over three and a half years of age usually speak short but articulate sentences including subject, verb in correct tense, object, pronouns, and adjectives. The vowel sounds are usually correct, and the first and last consonants of monosyllabic words are sounded. On the other hand, two-year-old children generally speak incomplete sentences made up of two or three word combinations intended to convey a complete idea. They repeat syllables, pronounce consonants imperfectly, and often omit the first or last consonants of monosyllabic words. For example, a child may say "pay

baw? ", meaning " can I play ball ? "; or " 'at no' yite ", meaning " that's not right "; or " ho ? " meaning " are we going home ? "; or " din-din ", meaning " I want my dinner ", and so forth. Such speech is popularly called " baby-talk ". It is the normal speech of one- and two-year-old children, it forms part of the language of three-year-olds, and is only rarely used by four-year-olds. Of course all pre-school children find difficulty in the pronunciation of certain words of two or more syllables and certain compound consonant sounds such as tl, th, pl, but this can be readily distinguished from baby-talk. The persistence of baby-talk as a regular form of speech after four years of age may have several causes.

Inarticulate speech may be chiefly the result of poor training. The child in his early speech practices may have pronounced little words incorrectly. Busy adults may have accepted his meaning as soon as it was clear to them without hinting at the correct pronunciation of the words. The accidental speech habit once started and found to bring satisfactory results may continue. Ordinarily children correct their speech of their own accord in conformity with the pronunciation of those about them. If the adults or children with whom they come in contact speak incorrectly, then the incorrect speech may be imitated. Children whose speech does not improve as a result of hearing others speak correctly either have poor learning capacity or social indifference, or their speech is being handicapped by emotional factors.

Some children continue to talk baby-talk for the attention, amusement and pleasure it brings them. Parents often laugh at the funny sayings of their children, visitors remark how cute they are, and the children are often asked to repeat their inarticulate remarks for the amusement they cause. Earnest youngsters who realize there is something odd about their speech try to copy the grown-ups and to speak correctly. But the children who are so flattered and elated by the attention they have received continue to speak in the effective and apparently approved way.

Pampered and spoilt children often talk babyishly as there is no need for them to speak clearly. They always get what they want at the least hint or gesture. So long as they remain infantile in manner and speech their parents treat them as babies, do everything for them, caress them and amuse them.

If the ministrations cease, a whine may be set up and wishes are again gratified. Thus a whining, drawling speech may be developed. Baby-talk and whining speech may therefore be evidence of a dependent attitude in a child, a clinging to babyhood, comfort and security.

Occasionally three- and four-year-old children who have already learned to speak fairly well may lapse into baby-talk after a new baby arrives in the family. They are probably missing their accustomed attention and affection. Their strong desire for these things causes them to act like babies in the hope of getting the attention they received as infants. They may want help in undressing and in other little acts of skill which they can do quite well for themselves; and they may talk babyishly as a part of the infantile behaviour. Any child over three and a half years of age who has preserved the semi-articulate speech of babyhood fails to score on item thirty-one. For, in children of normal intelligence and opportunity such as those who usually attend nursery schools, the baby-talk is most probably determined largely by emotional factors.

Specific speech defects, such as lisping (substitution of th for s), lalling (difficulty with r and l), and stuttering, may also be determined by poor training, slight physical defects or emotional factors. There may have been failure to correct accidental mistakes in the early stages of speech learning. There may have been others in the environment with such speech defects; and the little peculiarities of pronunciation may have met with amusement and apparent approval. Such defects may also result from excitement and haste to express impelling ideas, from forcing and pressure in early development by enthusiastic and anxious parents, and from inhibition due to fear of criticism or of making a poor display in public. The child's attention may also have been so much directed to the defect that it reinforces rather than eliminates the habit.

Stuttering may result from anger and a hasty desire to express annoyance, in addition to the above factors. It may likewise be the outcome of difficult competition with older children. The little one may get excited and anxious to do as well as the others, and stuttering instead of controlled and orderly speech may result. Children who have developed the stuttering habit usually exhibit it in school, only when they

are annoyed about something or when they are excited or afraid. Thus any child who has frequently lisped or lalléd fails to score on item thirty-two, and a child who has stuttered in his speech fails to score on thirty-four.

Slow and whining speech may be reminiscent of babyhood, and halting speech may be an evidence of timidity or emotional conflict. Children who are afraid of adults or annoyed at them may have slow and halting speech. Also children who whisper in their speech are usually those who are afraid of reproof or of making a poor show in public, or who are self-conscious and shy. They want to express themselves and at the same time to get out of sight and into a place of security. Any child who has unusually slow or halting speech, or who generally whispers in his speech, fails to score on item thirty-three or thirty-five of the scale.

CHAPTER XIV

SUMMARY OF PRE-SCHOOL EMOTIONAL DEVELOPMENT

DAILY study of the emotional behaviour of children in a nursery school has shown fairly conclusively that emotional behaviour and therefore the emotions develop as a result of experience. Children differ in their emotional behaviour because of slight physical or hereditary differences, but mainly because of variations in emotional experiences prior to entering school and during the school period. But although children vary considerably in their emotional reactions, certain groups of them show elements in common in their behaviour. This is probably due in part to the fact that children have many emotional experiences in common. They are subjected to similar emotion-producing situations both at home and at school, and some of them have rather similar physical constitutions.

Very general stages of emotional development are shown in a group of pre-school children. These stages, however, are less clearly defined than those of social development. The children who enter school with similar reactions to emotion-producing situations do not all progress through the same stages, because each has different emotional experiences both at home and at school. These experiences determine the trend of a child's development towards the more expressive or the less expressive, the more timid or the more aggressive type of behaviour, and so forth. It is therefore only possible to state which general types of behaviour are more common than others in a given setting at different age levels within the pre-school period. These behaviour types will vary somewhat from group to group of children and in different school settings. As in the case of social behaviour, if a sufficiently large number of children in different schools were studied, it might be possible to find certain elements and stages of emotional

behaviour in common, which would constitute emotional norms.

In the last five chapters different kinds of pre-school emotional behaviour in relation to certain school situations were described, and general developmental stages were indicated. These stages in emotional development are summarized below in the order in which they were mentioned. Since they were derived only from a study of about fifty children in one nursery school they cannot be expected to have very general significance. Further study would be required to prove the validity or otherwise of these findings.

I. Distress and Tears.

Crying accompanied by tears is a characteristic reaction of children, especially those under three years of age, to a distressing situation. This may be one predominantly of discomfort or pain. It may be a shock or the feeling of insecurity. It may be an annoying situation due to interference. And occasionally distress may be caused by over-stimulation of an interesting kind and the resulting excitement. Tears flow only when there is some redeeming feature present, and they help to relieve unpleasant emotional tension. Relaxation and a bodily attitude of depression may follow an outburst of tears. The redeeming feature in most tear-producing situations for the pre-school child is usually the immediate or expected arrival of adult assistance, attention and sympathy.

As children develop they cry less frequently and in fewer different situations. It is rare for children over three years of age to cry at school more than four or five times in a month. When these children are distressed about anything, they usually make complaint or find some practical way of solving their difficulties.

New children and those under three years of age cry more often from fear, loss of security, and slight discomfort than do older children or those who have attended school longer. The little ones also express urgent needs or strong dislikes by crying, while older children in the school gesticulate or verbalize their likes and dislikes without actually crying. Three- and four-year-olds cry more often from annoyance and extreme discomfort or pain than they do from other causes. This may be partly because familiar school situations are no longer fear-producing to them, as they may be to new-comers. Thus

the chief source of emotional disturbance in school for older children is interference from others.

There are three types of reaction commonly substituted for crying in distressing situations. These are: calling out or exclaiming, violent activity or impulsive gesture, and passive silence. The average child behaves in all three ways on different occasions. The more impulsive and less controlled children always call out or respond actively to the situation, while the more inhibited or emotionally indifferent children remain silent and inactive. In general, the older the child the more violently disturbing must be the situation to arouse tears or active emotional response.

II. *Fear and Caution.*

Fear is induced by shock, sudden or intense stimulation of any of the sense organs, demanding adjustment which the child is unprepared or feels unable to make. It may also be aroused through association of the immediate situation with previous experience of a disturbing or painful kind. New elements in a situation or the loss of familiar ones may cause fear in young children. Intense fear is characterized by momentarily checked breathing, tearless screaming, inhibition of movement, opened eyes and often pallor of face. Such fear is seldom seen in the nursery school, and may occur at any age. It is aroused only by very sudden and disturbing circumstances which interfere with normal physical functions and fundamental biological needs.

Milder fear is characterized by stiffening of the body, cessation of movement, and opening of the eyes, followed by crying and protesting, exclaiming or calling for help. Such behaviour is fairly common among children under three years of age, when they are startled, when facing new situations and also when they feel the absence of adults on whom they have been dependent for help and comfort in the past. Older children usually show less emotion and more action in their responses to startling and unfamiliar situations. They jump, exclaim, verbally express their wish to get away or be removed, run away, draw back or otherwise try to avoid the situation. The young children under three years old also make impulsive attempts to get away after the first shock of the new and overwhelming situation.

Very generally speaking, the usual course of development

in pre-school fear reactions is as follows: first appears inhibition of movement and helpless crying, then follows impulsive attempts to get away or avoid the situation. At a later stage the average child shows less general shock or inhibition. He merely jumps or hesitates, and then makes more specific and appropriate attempts to remove or avoid the trouble. The most mature children in the group show only slight hesitance, verbalize their discomfort, and exhibit more willingness to accept the situation and make quick adjustment to it.

Almost any new situation may frighten two-year-olds. Their fears are general reactions to somewhat undifferentiated situations, while three- and four-year-old children show more specific fears. They may avoid dogs, withdraw from certain children, refuse to climb the jungle gym, and so forth. Only slight changes in a situation, such as the starting up of an electric fan or the entrance of a visitor, may cause marked fear in a two-year-old; whereas only gross changes, especially those affecting the child's person, such as cuts and heavy falls, commonly arouse fear in older children.

Some older children show extreme fear in situations where they are relatively secure and apparently not subject to any immediate sensory shock or disturbance. Such fear is an emotional habit aroused through association of elements in the present situation with similar elements in a previously distressing situation or series of situations. Four-year-old children may also refer in their conversation to imaginary fears which are probably built up by association. These are unstable and can be removed by explanation and imagination in much the same way as they are built up. Other fears are only removed gradually through varied experience and training in self-expression, through association of pleasing and interesting experiences with the feared situation, and through the development of more and more skilful and adequate responses in relation to different situations. Fearlessness and courage grow with greater knowledge and understanding and with greater confidence in ability to act appropriately in an emergency.)

III. *Anger and Annoyance.*

Anger in children is aroused by interference with activity and especially by interference with the satisfaction of instinctive drives or strong desires. Its most violent form is the

temper tantrum which occurs only rarely in the nursery school. The children who exhibit temper tantrums are usually under three and a half years of age and at the assertive stage in their social development. Tantrums are characterized by momentarily checked breathing, screams, tears and sobs, complete bodily tension and flushing or pallor of the face. The body stiffening is usually followed immediately by active kicking, hitting out and vocal protests. In the less violent forms of anger, aggressive movements and vocal protests are the chief characteristics.

The two kinds of interference which cause anger in the nursery school are thwarting of strong desires and requirement to do something disliked. The children under three often show marked anger by crying, fighting, and stamping, when other children take their toys or when adults make unpopular demands. Three-year-olds usually show less anger on such occasions. They call out instead of crying and pull at what they want instead of hitting wildly. Four-year-old children are still more restrained in their behaviour. They explain what they want or merely hold on to the disputed toys.

The first stage in development is characterized by general and active demonstrations of anger, such as crying, yelling, hitting and kicking. At this stage temper tantrums are most common. Later the strictly emotional characteristics of checked breathing, crying, and changes in facial colour diminish ; and the active responses become more specific. Appeals for assistance, verbalized protests, frowning or pouting, and pulling at the desired object instead of general hitting out are common at this stage. Finally, the most developed children in the pre-school group refrain from aggressive actions and find some compromising solution for the problem. They share their materials, quickly comply with requests and return to their play, or merely laugh when other children tease them. Development therefore consists in the replacing of emotional and general aggressive responses by more and more specific and socially acceptable adjustments to the interfering situation. It comes with the development of varied interests and skills and with practice in the exercise of resourcefulness.

Two-year-old children are perhaps more often angered by other children than by adults. Independent youngsters between two and a half and three and a half years of age, at

the obstinate stage in their social development, frequently show more annoyance at adult interference than at interference by children. Four-year-olds have usually learned to accept adult authority to some extent, and they again show annoyance mostly at the interference of other children.

IV. *Delight and Affection.*

Delight is shown by children in response to sensory stimulation of a pleasing kind and sudden realization of unsatisfied desires. It accompanies unhampered general activity and the gratification of keen interests and instinctive drives. As specific interests and skills develop general delight gives place to more organized and definite joy. Delight and joy develop, generally speaking, as distress, fear and anger diminish. When children become less afraid, less easily angered in school and more familiar with and responsive to the school surroundings, they become more joyous in their behaviour. When confidence in their own abilities replaces lack of confidence, fear of action is supplanted by delight in action. A few children develop in their expressions of delight and in their joyous interests and at the same time remain particularly susceptible to tears. They show gay moods and depressed or irritable moods similar to those of certain adults.

The earliest expressions of delight in the nursery school are smiles, laughter and welcoming gestures, or movements approaching the source of delight. Later sudden delight is expressed by vocal exclamations such as "oo", and by more noisy or explosive laughter. In intense delight and joy the cheeks may be slightly flushed and the lower eyelids raised, and there may be an increase in bodily activity. The latter may take the form of running, jumping, singing or chattering. Two- and three-year-old children express enjoyment in smiles, laughter, spontaneous general activity and welcoming gestures. Four-year-old children, in addition, may give verbal expressions of welcome and engage in more specific activity appropriate to the occasion. For instance, they will move chairs or fetch books ready for a story, or hurry to get dressed for sleighing instead of merely jumping about wildly.

It seems probable that laughter, like tears, is an expression of mixed emotion; but while weeping is dependent upon a dominance of distress and unpleasant tension, laughter is determined by a preponderance of pleasing sensations and

release of action. Unsatisfied or partially satisfied desires form the element of tension, which is relieved by opportunity for free play and by the stimulation of keen interests and instinctive drives together with a chance to express them. Thus it is that, as attention turns from the unpleasant elements to the pleasing or amusing aspects of a situation, a child's tears may change to laughter. Hesitant smiles are the first expression of pleasure to appear in school, and laughter follows as the children become less timid and shy.

Children first show enjoyment in simple activities and new playthings by smiles and by approaching or explorative movements. They laugh in spontaneous general activity and when they see or hear others laugh. Gradually as they develop a sense of the fitness of things, three- and four-year-old children laugh more and more at incongruities and absurdities. They feel that they know better how things should go. Also, as their interests and skills develop, they make welcoming exclamations and approaching and other appropriate gestures at the promise or presentation of certain occupational material, games, stories, foods or other things.

The delight children exhibit as a result of receiving or giving embraces may perhaps be considered a separate emotion—namely, affection. When receiving affectionate attention they express their pleasure in smiles, exclamations, approaching movements and particularly in patting, stroking, hugging and kissing. Two-year-old children usually show more affection for adults than for other children, possibly because adults have been responsible for bringing them more comfort, sympathy and attention in the past. They exhibit affection for the older children who help and take care of them, usually by sitting beside them and refusing the attentions of others. Three- and four-year-old children show mutual affection, and apparently take even more pleasure in hugging and kissing than in being hugged or kissed. Some older children take special delight in looking after the little ones, carrying them about, sitting beside them, or holding their hands. This parental affection begins to develop about the third or fourth year, while filial affection develops before the pre-school period. There is no evidence of sex preference in the affections of pre-school children. Little boys are as much attracted to each other as they are to little girls; and similarly the girls show as much affection for one another as they do for the boys.

V. Excitement and Enuresis.

Excitement appears to be a mixed emotion made up of elements of distress, fear, annoyance and delight. Any one of these emotions may be dominant. The most common form of excitement in the nursery school is that in which delight is dominant. Children show delighted excitement as a result of excessive or sudden stimulation of a pleasing kind. It may come through stimulation of the senses, including the kinesthetic senses involved in action ; and it may come through stimulation of the imagination and association with past experiences of pleasing events. It usually accompanies the sudden release of pent-up instinctive drives and the immediate or promised satisfaction of keen interests and unsatisfied desires. Since instincts are either an inheritance common to the human race or universal habits acquired largely in infancy, the most effective excitement-producing situations are more or less the same for all pre-school children. These are sudden opportunity for self-display, free activity, vocalization, personal achievement, social companionship, eating pleasant foods, and possessing interesting things. Other causes of delighted excitement will depend upon a child's particular interests and abilities, and these will vary with age. For instance, two-year-olds show little excitement at the proposal to play round games, while four-year-old children may show considerable excitement at such a suggestion.

The characteristic expressions of delighted excitement among three- and four-year-old children are : raising of the voice as in shouting and squealing, spasmodic outbursts of laughter or giggling, increased general activity and hastiness, and carelessness or inco-ordination of movement. In addition the face may become flushed, the surface of the body warmer, and perspiration may follow.

Some children, particularly those under three years of age, show what might be termed distressed excitement in an exciting situation. This is characterized by speechless stiffening of the body, cessation of movement, pallor, and sudden outbursts of tears. There may also be loss of appetite and even vomiting. Children who show this form of excitement are probably more affected by the shock of the new situation than others are. For them the fear and distressing elements of the situation are dominant and there may even be disappointment and anger present. The more apprehensive

excitement is exhibited by timid and fearful children, while irritable excitement is shown by those who are easily aroused to anger.

As children develop they show more specifically appropriate reactions in regard to exciting events or things. Those who usually manifest excitement in extreme hilarity and roughness develop more control over their movements when they grow older. They may laugh and join in the fun, but without knocking others over or damaging furniture. They shout less loudly, and they express excitement mainly in haste and slight awkwardness or carelessness in their occupations. The new children and those who have a tendency to inhibition of action on exciting occasions usually become freer in their movements in time, and smile and join in the fun with the others. Some two-year-old children exhibit distressed or apprehensive excitement during their first few months at school. This gradually changes to delighted excitement during the following year. Then still later, when they are between four and five years of age, they develop more control over their excitement, but the dominant emotion continues to be delight.

One of the manifestations of excitement is enuresis. This may occur only during exciting events, or it may be a habit of a chronically excitable or inadequately trained child. It is a fairly common occurrence among new children, especially those under two and a half years of age. Enuresis also occurs on occasion at school among three-year-old children, but seldom among those over three and a half years of age. Children with well-established toilet habits sometimes show excitement by unusually frequent requests to go to the toilet. Certain children regularly require to urinate more frequently than others. It is difficult to say definitely in each case whether this is a result of faulty training in bladder control for short intervals only, or whether it is a manifestation of an excitable temperament. Most of the children under observation who required to go to the toilet frequently also showed marked excitement in school.

VI. *Mannerisms and Speech Anomalies.*

Mannerisms are relatively simple and automatic motor habits which take place usually in addition to the main activity of a person and apart from his attentive consciousness. They

often occur in children during moments of strain, when there is inhibition or conflict of strong impulses, as for instance during the solution of a difficult test problem. They may occur when a child is unoccupied and is under the strain of unsatisfied biological needs or drives, as when he is hungry and requires food, when he is tired and requires sleep, when he needs to go to the toilet, or when he needs outlet for play activity. They may occur as a result of distress, fear, or annoyance ; and they may also occur as a result of excitement. In all these cases the inhibited and dammed-back energy, or the freshly liberated energy of interested effort and excitement, finds partial outlet in the early acquired pleasing or simple motor habits called mannerisms.

Among the most common mannerisms are thumb-and finger-sucking, nail-biting, and nose-picking. Finger-picking or twisting, body-rocking, hair- or garment-twisting, and grimacing, are less common ; while blushing, scratching, and genital manipulation occur least often in school. As children develop there is a change in type of mannerism. In general finer movements replace the grosser ones. Also mannerisms appear less frequently and certain ones disappear. Two-year-old children frequently suck thumbs, fingers and other objects ; three-year-olds suck their thumbs or fingers, but fewer times in the day ; while four-year-old children only suck their fingers once or twice a day or even less. Body-rocking, jumping up and down, foot-shaking, tongue extrusion, and nose-picking are fairly common under three and a half years of age, but are of rarer occurrence after that age. On the other hand, finger-play, garment-twisting and nervous giggling are more characteristic of four-year-old children than of younger ones, though these mannerisms do not appear often.

Speech anomalies may also be emotionally determined, and lapses in speech may occur during moments of excitement and stress. Baby-talk as a common form of speech after four years of age is usually determined by a strong wish to be "babied" ; but in some cases it is caused by jealousy. Whispering and slow, halting speech may be determined in part by fear and anxiety. Stuttering may be the outcome of anger, fear or excitement ; and lisping and lalling may be determined or exaggerated by emotional conflict, anxiety, disappointment, hasty excitement and annoyance. Gradually as freedom of movement, self-confidence and greater skill in

self-expression and resourcefulness develop, speech anomalies disappear. This comes about with the development of organized interests and the diminution of self-consciousness.

It must be emphasized that the above-mentioned stages in development are only very general. No child progresses steadily through these stages. There are always relapses, and there may even be developments of an undesirable kind in emotional behaviour. Children of the same age vary with regard to susceptibility to shock, timidity, temper, irritability, excitability, joyousness, affection, mannerisms, and speech development. This is due to physical differences and variation in emotional and other experience. Children, moreover, progress at different rates and in different ways due to changes in their physical condition and to different environmental influences and emotional experiences.

CHAPTER XV

A GENETIC THEORY OF THE EMOTIONS

CONTINUOUS observation of the emotional behaviour of pre-school children revealed to the writer certain facts which lend support to some of the more recent theories concerning the emotions. One of the most important of these facts is that the behaviour aspect of the commonly recognized emotions is very complex and consists of much more than visceral pattern reactions. The behaviour described in the previous chapters is made up of reflexes and instinctive reactions, motor habits and new motor combinations, as well as circulatory and glandular changes. Possibly the visceral reactions are the essential features and the core of the emotions, but they constitute only a small part of emotional behaviour as ordinarily understood both by psychologists and laymen. The emotions instead of being termed visceral pattern reactions should perhaps be described as certain changes in the behaviour of the total personality, including particularly visceral and glandular changes and the effects of these upon instinctive, habitual, and other overt behaviour. This statement would agree with the view recently expressed by Dashiell.¹

Certain other facts which were brought out through the observation of children's emotional reactions also corroborate Dashiell's findings and substantiate his point of view. For instance, there do not appear to be distinct visceral pattern reactions corresponding to the different common emotions. Flushing, quick breathing, perspiration and so on, may be factors in such different emotions as fear, anger and delighted excitement. Moreover, different children, while manifesting certain overt behaviour responses characteristic of the same emotion, may exhibit different visceral changes. For example, a child may be pugnacious and violent with anger, while his

¹ The works of the authors referred to in this chapter will be found in the Bibliography.

face becomes pale. Another child exhibiting the same overt behaviour may be red in the face with annoyance.

On the other hand, while there are marked individual differences in the visceral components of any emotion, by the pre-school age there are some general differences in visceral response characteristic of certain emotions rather than others. For instance, the peripheral vasoconstriction, muscular tension, pallor and crying associated with fear are not common in joy, which is characterized more by relaxation or normal muscle tonus and partial dilation of the peripheral blood-vessels, bringing warmth to the surface of the body.

Children also show changes in visceral as well as other responses with development. A child who loses his appetite with excitement during one stage of his development, at a later stage may be very excited without the accompanying loss of appetite. Another child may become active and flushed with excitement in anticipation of a party, an event which previously caused him to stiffen, tremble and turn pale. Thus visceral pattern reactions like any other form of behaviour seem to undergo processes of differentiation and co-ordination in the course of human development. Moreover, the two main branches of the autonomic nervous system do not appear each to act as a whole. Partial or specific autonomic nervous responses seem to become conditioned through experience just as specific motor reactions innervated through the central nervous system become so conditioned. It also appears that visceral responses become differentiated, combined and conditioned in different ways in different children as a result of physiological and environmental differences.

It is quite possible that certain children by original nature have a tendency towards sympathetic rather than parasympathetic responses, and vice versa. These tendencies may, however, be wholly acquired as a result of experience. That the differences exist there is no doubt from observational studies. Certain children appear to be habitually inhibited and tense, while others are predominantly relaxed or impulsive. Some are tearful and others are not. Some are easily aroused to excitement, while others appear unmoved even by the grossest stimulation. For example, in a group of twenty children all but two exclaimed with delight, jumped from their seats, laughed and clapped their hands, when a birthday cake illuminated with candles was brought into the room at the end

of an ordinary school dinner. The other two children appeared interested for a moment, but kept their seats and presently asked for toast rusks, which was their custom if they still wanted more to eat at the end of a meal.

The visceral part of emotional reaction therefore varies from individual to individual, and shows so little uniformity in the manifestations of any one emotion that it is difficult to differentiate the emotions on the basis of visceral reactions alone. Dashiell suggests that the conventionally described emotions "refer to different types of viscerally facilitated or inhibited overt *behaviour* patterns that have been classified and labelled more in terms of their *social* significance than in terms of their *visceral* components. Further, so far as the visceral patterns are concerned, we may entertain the possibility that there are no *native* patterns of visceral reactions at all, but that the patterning that is to be later discovered in particular individuals is traceable to their experience, is acquired."¹

Tolman has also pointed out that the three primitive emotions, fear, rage and love, distinguished by Watson in the behaviour of infants, are pictures of total behaviour and not specific visceral responses. Stratton has shown how difficult it is to distinguish between fear and anger even in the adult and suggests that there is a basic undifferentiated emotion—namely, excitement. This view appeals to the writer especially in the light of observations made upon children's emotions. Taking as a basis these personal observations and the findings and theories of other psychologists, particularly those already mentioned, the writer has developed a genetic theory of the emotions as an attempt to account for all the phenomena observed, including the fact of emotional development. This theory is mainly a combination and an extension of the views of Watson, Dashiell and Stratton, and is outlined briefly below.

It seems probable that the visceral responses like other responses are somewhat unco-ordinated at birth. A strong stimulus or a sudden call to action creates general disturbance or *excitement*. It is difficult to tell whether a baby is frightened, angry, or even pleasantly excited. All parts of the autonomic nervous system are probably activated, and there may be alternation between sympathetic and parasympathetic hyper-

¹ J. F. Dashiell, "Are there any emotions?" *Psychol. Rev.*, 1928, 35, p. 325.

activity. This general excitement within a very short time, perhaps days and perhaps only hours, becomes somewhat differentiated into two general types of emotion as a result of experience. The increased tension and mutual inhibition of many innervated muscles in response to situations, such as sudden disturbance of posture and hampering of movements, is both the result and further cause of autonomic activity, particularly sympathetic. There results an emotion somewhat different from general excitement, which may be called *distress*. This is the concomitant of unsatisfying experience, and is probably what Watson has described as fear and rage.

The emotion aroused by progressively satisfying stimuli, such as to and fro movements, stroking and tickling, the contact of the nipple or the appearance of food during moments of hunger, is more akin to the joyous excitement of older children and may be termed *delight*. The infant ceases to cry and smiles, coos and waves his arms. This gesticulating, gurgling behaviour of the delighted infant when presented with his bottle may change to distress if the bottle is withheld. The baby's muscles become tense, his face red and puckered, and he cries vigorously. The hunger sensations have probably been intensified by the sight of the bottle, and the feeding responses are checked and unsatisfied. Distress and delight in the infant are very readily interchangeable.

The behaviour described above as infantile delight is the same as that designated by Watson as "love". This seems to the writer to be an unnecessarily broad use of the term "love". It is suggested, however, that primitive delight later becomes differentiated and associated with various instincts and behaviour patterns to form several well-known adult emotions, one of which is love.

The genetic theory of the emotions is thus that excitement, the undifferentiated emotion present at birth, becomes differentiated and associated with certain situations and certain motor responses to form the separate emotions of later life. This process of differentiation and integration takes place gradually, so that at different age levels different emotions are distinguishable. The first two emotions to be thus differentiated in early infancy are those referred to above—namely, distress and delight. These are distinguished by slight differences in visceral reactions, by the accompanying overt behaviour, and by differences in the provoking situation.

Distress in infancy is characterized by muscle tension, interference in breathing, change in facial colour, trembling and crying. It is aroused by sudden or intense sensory stimuli, either internal or external, and by interference with normal activity such as the free movement of arms and legs in response to touch. Delight in an infant is characterized by relaxation of tension or normal muscle tonus, gurgling of saliva in the mouth, and by free random movements and soft vocalization. It is aroused by mild sensory stimuli, especially kinesthetic and cutaneous, which are changed sufficiently slowly or rhythmically to allow of muscular adjustment and compensatory responses. Delight is aroused by stimuli which facilitate natural response, whereas distress is aroused by stimuli which inhibit motor response or which come suddenly when the organism is not set to compensate for the shock.

As the infant develops other emotions may be recognized. These are certain behaviour patterns of the total organism and are characterized more by the specific motor responses involved than by the visceral responses. The particular emotion is also determined by the nature of the situation which prompts it, including both the internal bodily and external conditions. Thus distress becomes differentiated into fear at sudden shock and anger at interference. Delight also becomes further differentiated into joy and affection.

In *fear* certain responses of distress are exaggerated and are combined with instinctive avoidance reactions. Another similar group of responses forming part of the original distress are augmented and combined with pugnacious reactions to form the emotion of *anger*. Still another emotion derived from distress, especially at loss of accustomed attention and affection is *jealousy*. Among the more specific pleasant emotions is *joy*. This is the manifestation of certain forms of delight in connection with organized interests. It may also include a possible pleasure-seeking instinct. *Affection* is response to caresses and other evidence of affection from another person and also to objects associated with such demonstrated affection. In the case of *filial affection*, it includes certain parts of the response of delight together with gregarious tendencies and submission. *Maternal affection* is a combination of certain delight responses with gregariousness, submission and self-assertion. Mutual affection between children is both filial and maternal.

It is not quite clear just when the different emotions can first be distinguished. More observational studies of the emotional behaviour of infants and young children of various ages need to be made before the emotions characteristic of each age period can be ascertained. By the pre-school age there appear to be seven or eight different emotions. These are outlined briefly in the following paragraphs. They have also been discussed in detail in the previous chapters. They include not only the emotions with distinct characteristics noticeable at the pre-school and subsequent ages, but also the more undifferentiated emotions of early infancy.

It is difficult to determine from general observation of behaviour in uncontrolled situations just what constitutes the separate emotions. Situations in everyday life are so complex that they frequently arouse many kinds of response at once. Thus more than one emotion may be aroused by different aspects of the same situation. A frightening situation, for instance, may also be an annoying one. Observation of emotional behaviour on many different occasions helps in the isolation of the separable behaviour combinations which may be called emotions, because in different complex situations different pairs or groups of emotions may be aroused.

Fear is quite distinguishable at the pre-school level and probably becomes differentiated sometime during infancy. It is aroused by sensory shock and by the sudden omission of familiar stimuli. It is also aroused by the anticipation or memory of such shocks and sudden calls for adjustment. The behaviour, as already described, is characterized by checked breathing, opened eyes, stiffened muscles, and so forth. It also includes escape reactions of withdrawing or running away. These when considered by themselves are instinctive reactions, but in conjunction with the autonomic and visceral responses they form part of the behaviour picture of the emotion of fear.

Similarly the emotional behaviour denoting anger is largely made up of aggressive reactions characteristic of the instinct of pugnacity. But these reactions in conjunction with change of facial colour, deep breathing, and tensed muscles constitute the emotion of anger in terms of behaviour. This is another emotion distinguishable at the pre-school level and is aroused by any interference with action, with plans, or with the satisfaction of desires.

Jealousy, a modified form of anger or of fear, resulting from failure to receive accustomed or expected attention and affection, may also be recognized at the pre-school level. It may be shown in assertive rivalry, protruding lips, and stubbornness, or in relapse to infantile whining and demand for assistance and cuddling. Emotional jealousy is a rare occurrence in the nursery school. But children frequently approach adults for attention when they see another child being spoken to or praised. This is not necessarily jealousy, but rather an instinctive bid for attention as a result of suggestion.

General distress continues to be shown on occasion by the pre-school child in fear- and anger-producing situations, and as a result of physical discomfort. It is usually a response to a complex situation comprising one or all of the above types of situation, and often some redeeming feature such as adult assistance or sympathy. In intense form the distressed behaviour of the pre-school child resembles that of the infant and includes crying, puckering of the face, interference with breathing, and some motor attempts to remove the cause of trouble either by avoidance or aggression. In less intense form it is expressed in calls for aid, protests or whines. The two- and three-year-old children show more frequent evidence of distress than four-year-olds. Fear, anger, jealousy and general distress are all responses associated with unsatisfying experiences, conflict, interference with desires and some inhibition of movement. The distressed child feels incapable of tackling the situation alone. In fact undifferentiated distress exhibited at any age is usually a response of the relatively dependent, helpless and submissive.

Excitement is still a common emotion at the pre-school level and continues to be throughout life. It appears in different forms according to which of its emotional components is dominant. The form usually aroused by situations in the nursery school is delighted excitement. In this the emotional bias is on the side of delight. Distressed or apprehensive excitement, in which the distress and fear elements are stronger, is shown less frequently and chiefly among the younger children. All excitement is aroused by complex situations, including both disturbing and pleasing elements. In pre-school, delighted excitement the main determining factors are release from tension, as when discipline is relaxed, and also highly pleasing sensory experiences and satisfaction of

intense desires. The disturbing factors in the situation are the sudden presentation of these delightful experiences, fear of unknown elements, and tension resulting from previous restraint. The characteristic responses are: increase in amount and speed of activity with slight inco-ordination of the finer movements, raised voice, rapid vocalization, laughter and giggling, heightened facial colour and increase in the surface temperature of the body.

Distressed or apprehensive excitement in the nursery school is shown in response to the same external situations as above, but especially when the situation is relatively new and overwhelming. It is characterized by tension and inhibition of movement, cessation of speech and laughter, perhaps facial pallor and digestive disturbances. Some children show alternate delight and fearful agitation or irritable impatience during excited moments; and quite frequently children change from excited laughter to tears of distress especially when tired. This mixed emotional behaviour is probably similar to the undifferentiated excitement exhibited by the infant, though the motor responses are more organized.

It would appear that at any age in childhood or adult life the more undifferentiated emotions belonging to earlier periods in development may be exhibited in somewhat modified form. The motor reactions involved in adult excitement, for instance, are more integrated and appropriate to the situation than those of the infant. These early undifferentiated emotions usually appear in later life as responses to complex situations which arouse several different emotions at once. Frequent manifestation of the more primitive emotional responses may also indicate marked emotional instability or susceptibility in an individual.

Delight similar to that of the young infant is still very much in evidence at the pre-school age. This is just being differentiated into two or three emotions about this period. It is a response to pleasing sensory stimulation, including particularly kinesthetic sensations from rhythmic muscular activity. Smiles and laughter, vocal exclamations, rhythmic movements, and gestures and movements approaching the cause of the delight are characteristic manifestations of this emotion. The more stable and less effervescent joy is shown in regard to organized interests such as games, stories or specific occupations. It is manifested by smiles, exclamations,

and appropriate movements in the execution of the interesting occupation or game. Smiles and laughter at amusing absurdities are also evidences of a joy which is more evolved than delight in mere sensory pleasures.

The pleasing stimulation involved in the recipience of human affection produces delight in the young infant, but in addition to delight it may prompt affectionate responses on the part of the pre-school child. Thus at this age demonstrated affection may elicit the undifferentiated response of delight, or it may arouse the more specific emotion of affection. Certain reactions become differentiated from delight and combined with caressing, kissing and embracing movements to constitute affection. Filial affection apparently develops sometime during infancy, first in response to adult affection and later in response to the mere appearance or contact of the adult. During the pre-school period parental affection and reciprocal affection between children seemingly develop. At least they make their appearance gradually in the somewhat artificial environment of the nursery school. Many four-year-old children in a nursery school will show marked interest in the younger ones by watching them and by approaching, caressing or assisting them. These children will also show unusual forbearance at interference from the little ones. Both boys and girls exhibit this parental affection. There is no evidence, however, of special affection between the sexes at this stage of development.

Thus at the pre-school level, fear, anger, joy and affection are more or less distinct emotions. Jealousy and filial and parental affection may be considered as separate emotions at this age in certain individual cases. General excitement, distress and delight, the emotions of infancy, are also quite common at this age. During childhood, adolescence, and adult life further differentiation takes place. Individuals develop differently and at different rates due to physical and environmental variations. But since they have many experiences in common they develop certain similar emotions. On the other hand, there seems no doubt that some people develop distinct emotions which others never experience, due to the peculiar circumstances of their lives and their own physiological and emotional bias. Not everybody experiences all the different emotions possible, but each individual develops only certain ones in accordance with his own experiences.

During early childhood filial and parental affection become separable from general affection. *Elation*, a particular form of delight or joy, can also be distinguished. This is a response to opportunity for self-expression and achievement, and involves stimulation and gratification of the instincts of display and self-assertion. *Hope* may be distinguished as anticipatory pleasure or imagined release from disagreeable circumstances.

Distress becomes further differentiated, and combined with submission and responses to checked assertion and display, to form *shame* and *disappointment*. The former is a response on the part of a child to the realization of his own bad conduct, while the latter is evoked by the removal of anticipated or actual pleasure. There may be cessation of action and dejection in both cases; though disappointment is sometimes expressed in angry protests and aggressive behaviour. Shame and disappointment often occur together.

Anxiety becomes differentiated from fear and distress and is a response to a problematic or uncertain situation causing conflict of impulses or anticipatory doubt. It is characterized by distraction of attention and inhibition of action, though there may be subsidiary nervous movements. The forehead may also be furrowed. *Disgust* is another specific form of distress which probably develops during early childhood. This is a reaction to disagreeable tastes and foods associated with unpleasant consequences, particularly nausea and vomiting. Sights such as sloppy messes, and sounds as of spitting, may also arouse disgust through partial and secondary associations. It takes the form of avoidance or rejection, often accompanied by nausea.

It is possible that an emotion, which may be provisionally termed "*pain*", becomes distinguishable from general distress sometime during childhood. In recent years evidence has been accumulated to show that a definite emotional reaction almost invariably follows upon the sensation of pain and becomes identified with the latter in conscious experience. The emotion of pain is a complex response, including particularly autonomic reactions to violent stimulation of many different sense organs and to excitation of free nerve-endings. Overtly it may be observed in tension in the lips and other facial muscles, holding the lower jaw stiffly, puckering the forehead and partial closing of the eyes, clenching the fists, crouching or stiffening of certain other body muscles. There may

also be sudden flushing followed by pallor, quickened breathing, perspiration, and spasmodic cries.

Depression is another emotion which becomes differentiated from distress during childhood and appears frequently during the period of adolescence. This emotion involves marked activity of the sympathetic autonomic nervous system with the resultant muscular tension and digestive disturbances. Psychologically, it includes thwarting of the self-assertive and display tendencies, together with a sense of insecurity. There is a general inhibition of action, lethargy, fatigue, aimlessness, and pre-occupation with the self.

Envy, revenge and jealousy become distinguished from anger during early childhood partly by the prompting circumstances and partly by combined overt responses. *Envy* is a mixture of anger, and thwarted assertion and display. *Revenge* is due to delay in the satisfaction of anger and pugnacity ; and *jealousy* is anger at thwarted self-expression and at the withdrawal or transfer of attention and affection previously received or anticipated. Jealousy may also be in part fear of loss of security and failure to command the desired attention. This kind results in seclusive or retiring behaviour.

Sometime during childhood or adolescence, as the sex organs and sex instinct develop, *sexual affection* becomes differentiated from general affection. This sexual affection in combination with filial and parental affection and certain other emotions and drives goes to make up the complex sentiment of love. There are many other emotions recognizable in the adult, such as remorse, sorrow, despondency, gratitude and awe ; and it is difficult to say when they develop and become distinguishable. Adults, moreover, can distinguish separate emotional experiences in their own consciousness, which the objective observer would fail to notice or would misinterpret.

The behaviour form of all the emotions changes along with general development. Exhibitions of fear in the adult, for example, differ from those of the pre-school child in that avoidance reactions may be more skilful and vocalization reduced. Even the undifferentiated emotions at later stages in life are expressed through organized and appropriate behaviour responses, instead of through disorganized impulsive action and random movement.

A diagrammatic representation of the proposed genetic theory of the emotions is given in Figure 65 on page 209. Only some

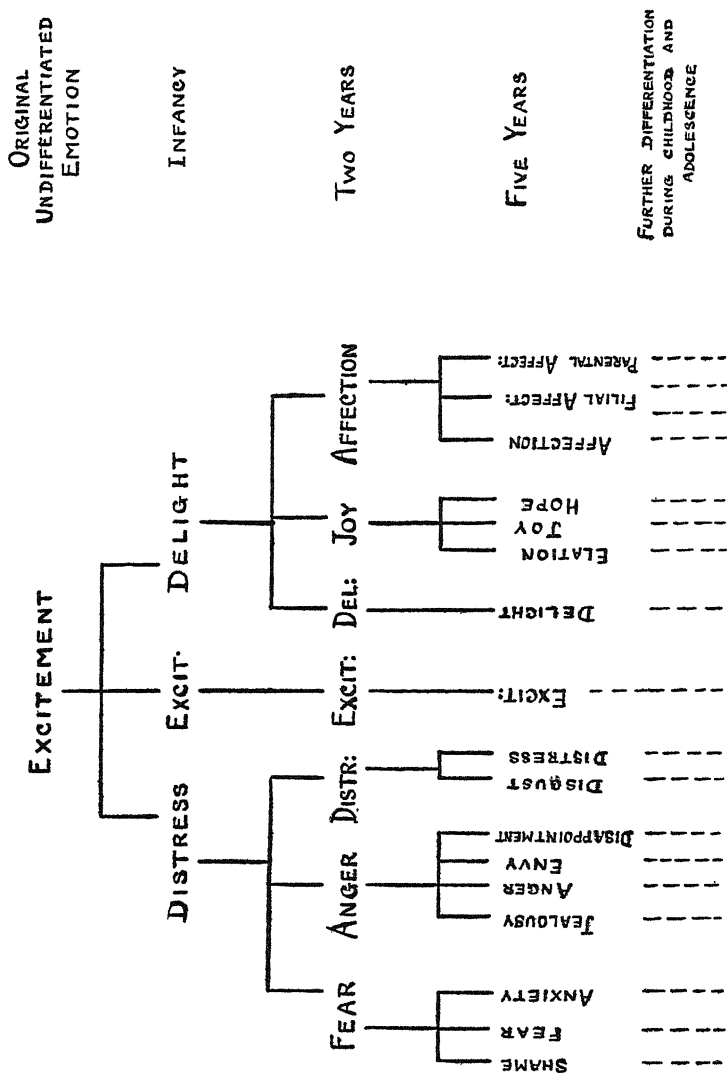


FIGURE 65.—A Diagrammatic Representation of the Genesis of the Emotions.

of the more outstanding emotions which may develop during childhood and adolescence are included. The diagram is intended to convey the idea of differentiation and development involved in the evolution of certain emotions, rather than represent a complete survey of the emotional repertoire of normal individuals at different age levels.

The above genetic theory differs from Watson's in maintaining that the common emotions are more than visceral pattern reactions, and that there are probably no native visceral patterns. The emotions are acquired as a result of differentiation and integration as well as conditioning of visceral and overt behaviour reactions. The theory is in conformity with that of Dashiell, but it adds the process of differentiation to those of conditioning and integration as a factor in emotional development, and describes some of the stages in the evolution of the emotions. Stratton's view that there is a basic undifferentiated emotion of excitement is incorporated into the theory. The conflict theory of Dewey and Drever is included to account in part for certain emotions, particularly the fear and anger group and their derivatives. Conflict, no doubt, also tends to increase emotion in general, and to change the character of the joyous emotions.

Emotion in the abstract, for psychological definition, may still be considered as mainly visceral and glandular reactions and the conscious correlate of these. But the emotions as recognized in everyday life include all other behaviour responses and conscious processes affected by these visceral changes. The biological function of emotion, judging from the behaviour of pre-school children, appears to be reinforcement of instinctive and other behaviour responses to particular situations. In situations calling for defence and deliberation emotion increases control of action, and in the more satisfying situations it increases the speed and facility of movement. In mixed situations there is both increase in motor control and in speed of thought and appropriate action.

Various writers have already pointed out that emotion reinforces instinct in adult behaviour. Stratton has suggested that the function of emotion generally is to increase adequacy and to supplement routine modes of response which at the moment appear inadequate. The writer would add to this suggestion that although the primary function of emotion may be greater adequacy of response, the actual result in

many cases may be greater inadequacy. This is probably the result of poor motor integration and paucity of behaviour pattern responses to situations of emergency. The most ready responses are stereotyped habits and instinctive reactions which may prove unsuitable to the particular occasion. Reinforcement of such actions may take place before they are apprehended as inadequate. Further cause of inadequacy may be unfortunate emotional experiences in the past, which have resulted in the establishment of general inadequate and undesirable emotional habits. For instance a child, who has been constantly frightened by an ill-tempered dog in the neighbourhood, may yell and run at the sight of any dog, thus stimulating the animal to bark and pounce and frighten him more.

A person who has many stabilized behaviour patterns, and who has had the good fortune in life to have a preponderance of satisfying experiences, is more likely to show greater adequacy than inadequacy under emotional stress. Such a person must have had some satisfaction and pleasure associated with situations which were also disturbing. Thus it seems probable that an excitable or emotional child, with favourable opportunity for varied experience and with training in the organization of drives and behaviour generally, might develop into a forceful character and an effective personality. The same child, however, if he had a preponderance of distressing or over-exciting experiences in early life, and if he failed to develop organized interests and drives, skills in action and useful social behaviour, might become a handicapped psychoneurotic or even a psychotic in later years.

PART IV

APPLICATION OF THE SCALES

CHAPTER XVI

THE SCALES APPLIED IN THE MCGILL NURSERY SCHOOL

THE results obtained from a year's application of the Social and Emotional Development Scales in the McGill Nursery School present some interesting features both quantitatively and qualitatively. Some of these results are given below and in Chapter XVIII, because of the light they throw on the scales, their limitations and possibilities. These results must on no account be taken as norms. They represent the observations of only one observer on a small number of children in a particular nursery school.

The chief value of the scales, as already mentioned, lies in their use as systematic aids to a qualitative study of children's behaviour. The numerical results from the scales should not be taken too seriously as they are determined by a great many uncontrolled factors. Very general comparisons may, however, be made between numerical scores. Every observer should make his own rough norms for this purpose in the school he wishes to study. These should be revised from time to time, since the various groups of children attending the same nursery school at successive intervals show marked differences. Fair comparisons cannot be made between the results of different schools and different observers.

The children in the McGill Nursery School were observed and scored by the writer on both Social and Emotional Scales during several months of the school year 1928-29. Social behaviour was scored four times, in May, October, and December 1928, and in March 1929. Emotional behaviour was

scored only three times on the revised form of the scale, in October and December 1928, and in March 1929. The methods of observation and scoring adopted were the same as those described in the directions in Chapter III.

Twenty-eight children were under observation at different times, fourteen boys and fourteen girls, although only twenty children were in attendance at school at any one time. During the year four children left school and four more were admitted. There were no children under two and a half years of age, as this was the age for school entrance at the time the study was made. Children left school when they reached their fifth birthday. There were eight children in Group A between two and a half and three and a half years of age, and twelve children in Group B between three and a half and five years of age. These groups spent part of each morning in different playrooms, but they were together usually for outdoor play, dinner, and afternoon nap.

RESULTS ON THE SOCIAL DEVELOPMENT SCALE

Four percentage scores were obtained for each child for the four months. The average of the four scores was found for every child. Averages of these average scores were then obtained for the two school Groups A and B, and for the whole school on each section of the scale and on the complete scale. These results are presented in Table III and in histogram form in Figures 66 and 67. It will be noticed that the scores on Section II, which represents relationship with adults, are always higher than those on Section I, which represents relationship with other children. The scores are also uniformly higher for Group B than for Group A, both on the separate sections of the scale and on the complete scale. It must be remembered, however, that Group A scores are obtained from Part A of the scale only, while Group B scores are obtained from both A and B parts of the scale. They are therefore not strictly comparable.

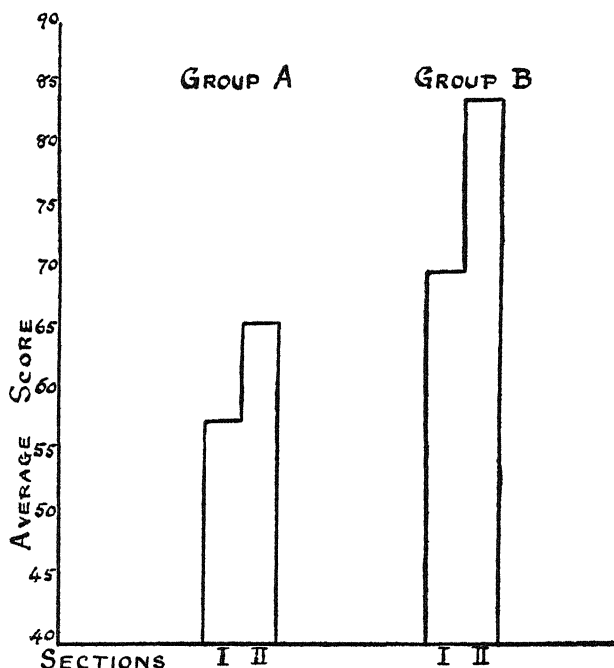
Results according to Age.

In spite of the fact that children over three and a half years old are scored on a scale partly different from the one for children under that age, the scores show fairly steady increase with age. This may be observed in the results presented in Tables IV and V. The average scores obtained in the four months for half-year age groups are given in Table IV. The slight drop in

TABLE III

GROUP AVERAGE SOCIAL DEVELOPMENT SCORES

	Group A.	Group B.	Whole School.
Section I	58	70	64
Section II	66	84	76
Complete scale	62	75	69



FIGURES 66 and 67 —Average Score obtained by Groups A and B respectively, on the separate sections of the Social Development Scale.

scores between the three to three and a half year group, and the three and a half to four year group, may be accounted for chiefly by the change in the form of the scale. It may also be due to the change in school situation, since children graduate to the class for older children at three and a half years of age. They then become the youngest instead of the oldest members of the group and therefore subject to unfavourable comparison of their abilities.

TABLE IV
AVERAGE SOCIAL SCORES ACCORDING TO AGE

	2-6 to 2-11 years.	3-0 to 3-5 years.	3-6 to 3-11 years.	4-0 to 4-5 years.	4-6 to 4-11 years.
Section I .	50	66	65	68	72
Section II .	58	78	75	84	86
Complete scale	54	72	70	75	79

The average scores obtained by the whole school in October and December 1928 and March 1929 were 69, 70 and 73, respectively. The same children, with only three exceptions, were present in school on these successive occasions. The average scores thus increase slightly for the same children as they become older.

The increase of Social Development scores with age and also with school attendance is shown in Table V. These figures represent the average scores on the complete scale for children who have attended the school three months or less, from four to six months, seven to nine months, and so on. The slightly lower scores for those who had attended school ten to twelve and thirteen to fifteen months may be accounted for in several ways. Children who entered school at two and a half years of age graduated to Group B at the beginning of their second year. Allowing three months for vacation these children were then three and a half years old and consequently were scored on both A and B parts of the scale. Teachers report also that there is usually a noticeable relapse in behaviour after the long vacation. Forms of social and emotional behaviour which had been outgrown before the vacation reappear for a few days, but are soon replaced by more mature behaviour.

TABLE V
AVERAGE SOCIAL SCORES ACCORDING TO SCHOOL ATTENDANCE

0 to 3 months.	4 to 6 months.	7 to 9 months.	10 to 12 months.	13 to 15 months.	16 to 18 months.	19 to 21 months.
52	65	74	72	73	76	80

The individual scores on the complete scale ranged from 37 to 97 with 75 per cent. of them falling between 55 and 82. The average scores quoted in the tables therefore give a fair representation of the size of score obtained by this particular group of children in the McGill Nursery School. Some individual scores and brief qualitative analyses of them are given in Chapter XVIII.

In order to find the relative significance of the various items of the scale from the point of view of showing development,

the numbers of (1), (0), and (—) marks against each item were added for Groups A and B separately. Two sets of scores, those obtained in October and December, were analysed in this way. A study of these results revealed that there were about fifteen items in Section I more significant than the others from the point of view of development. That is, on about fifteen items the children in Group B gained noticeably more points and fewer zeros than the children in Group A. Similarly in Section II there were about ten items more significant than the others. That is, the older children gained several more points and fewer zeros against these items than did the younger children. These twenty-five items are marked with an asterisk on the scale given in Chapter IV. It is suggested that these items, or a similar selection derived from more extensive use of the scale, might form an abbreviated Social Development Scale for practical purposes.

There were two items of doubtful significance, one in each Section. On these the older children gained more zeros and fewer points than the younger children. In each case this was probably because too much emphasis had been laid upon articulate speech in scoring. In number 26 of Section I, "Not frequently complained of others to adult for own gain", only verbalized complaints had been considered in the scoring and these are more characteristic of children over three and a half years old. If protesting vocalizations and gesticulations to attract adult attention are also included in the scoring, this item may be left in Part A.

Item 18 of Section II, "Not usually wanted to be shown how to use materials", was the other doubtful item. The older children have more complicated materials to play with. They are also more anxious than the little ones to learn the correct way to do things. Thus they score more zeros on this item. On the other hand, the little ones will often sit in front of a new set of material and wait to be shown what to do with it, while older children would investigate it for themselves. If the word "wanted" in this item were changed to "waited", then the item may still be considered suitable for Part A of the scale. This change has already been made in the scale given in Chapter IV, but not in Chapter VI.

Results according to Sex.

Very little difference was shown between the average scores of the boys and the girls when these were compared. The

average scores of eleven boys and ten girls of approximately the same average age, three years and ten months, were compared. There was practically no sex difference in the results on Section II of the scale, "relations with adults"; but the girls showed slightly higher scores on Section I, "relations with children". This was true both for younger and older children. The average score for all eleven boys on the complete scale, 68, was too near to the average score for the ten girls, 70, to imply any significant sex difference in the scores. These results may be seen in Table VI.

TABLE VI
AVERAGE SOCIAL SCORES ACCORDING TO SEX

Boys				
	Group A.	Group B.	Both Groups.	
Section I . . .	54	66	61	
Section II . . .	67	83	77	
Complete scale . . .	60	73	68	
GIRLS				
	Group A.	Group B.	Both Groups.	
Section I . . .	61	71	66	
Section II . . .	66	85	76	
Complete scale . . .	63	77	70	

An analysis of the scores on each item of the scale showed some qualitative differences between the results for the two sexes. The items in Section I on which the boys scored fewer points or more zeros than the girls were mainly those that penalized boisterous, rough activity. On the other hand, the items in Section I on which the girls scored fewer points or more zeros than the boys were those that penalized seclusiveness and unsociability. The results on Section II showed that the boys gained fewer points or more zeros on items which penalized undue assertiveness and reaction against adult authority. The girls gained fewer points or more zeros than the boys on items that penalized lack of friendly conversation and seeking after attention.

In other words, the particular boys studied appear to be more sociable and fond of group play than the girls, but they are also more impatient, rough, and defiant of adult authority. The girls are gentler, kinder to new-comers, but less sociable and slightly more anxious for adult attention than the boys. The actual numbers of the items on which the boys gained fewer points or more zeros than the girls are: Section I, 8,

12, 13, 18, 21, 22, 23, 24, 25, 27, 28, 35, 37, 41, 44 and 45 ; and Section II, 3, 7, 8, 9, 10, 12, 13, 14, 16, 27 and 28. The items on which the girls gained fewer points or more zeros than the boys are : Section I, 4, 5, 6, 9, 10, 31, 33, 47 and 49 ; and Section II, 1, 18, 19, 21, 25 and 26.

Comparison with Intelligence Test Results.

Although some correlation between Social Development scores and intelligence test results was expected, none was actually found. The slight positive correlation between the scores on the tentative Social-Emotional Development Scale and Stanford-Binet I. Q. had led the writer to expect a similar correlation between I. Q. and Social Development scores. Actually the rank difference coefficient of correlation between Stanford-Binet I. Q. and average Social scores for the four months was only $+0.1$. The correlation between Stutsman Performance scores and the same Social scores was -0.3 . These coefficients can have no significance for such a small number of cases, and it may be taken that the Social Development scores have shown no relation to intelligence test results. The slight positive correlation found between Binet I. Q. and scores on the earlier Development Scale may have been due in part to a chance sampling of children, and in part to the fact that the earlier scale contained items involving intellectual achievement which were eliminated in the revised scale.

The Social Scores of "Only Children".

Children who were the only ones in the family scored on the whole somewhat lower on the Social Development Scale than those who had one or more brothers or sisters. Most of them were better adjusted in their relations with adults ; but they were not nearly so well adjusted in their relations with other children as were those from larger families. When the average scores of the "only children" for three months were compared with those of other children, they revealed the following facts. Eight out of the ten "only children" scored below the average for the school group on Section I, while only two of the ten scored below average on Section II. On the other hand, only two out of the ten children from larger families scored below average on Section I, while four out of ten scored below average on Section II. These differences are probably not due to any sex factor, since there were four girls and six boys among the "only children"

The average scores obtained by the "only children" as compared with the scores of other children may be seen in Table VII. It will be noticed that the score on Section II for the latter is slightly higher than the score for "only children", in spite of the fact that there were fewer among them who scored above the group average. This is because the average score of these children was raised by two or three unusually high scores.

TABLE VII

	Average Scores of "Only Children".	Average Scores of Other Children.
Section I . . .	60	69
Section II . . .	77	79
Complete scale . .	68	74

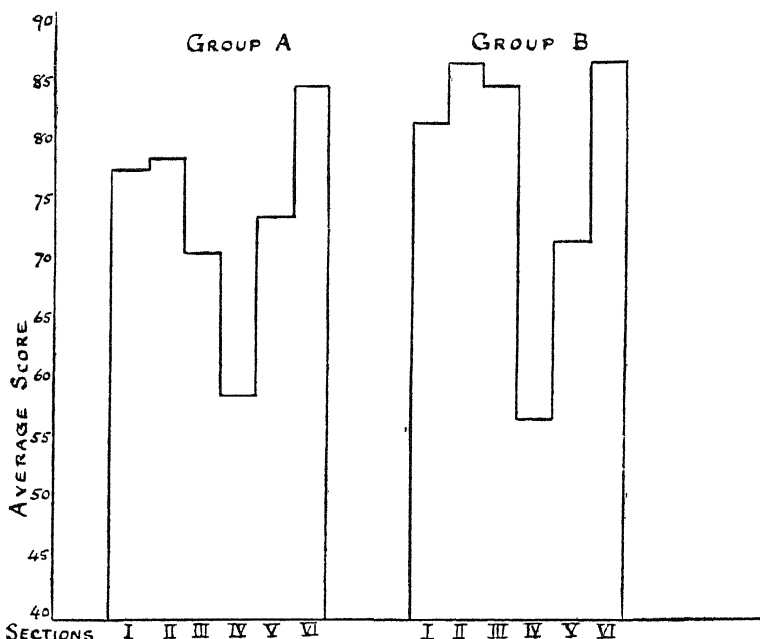
RESULTS ON THE EMOTIONAL DEVELOPMENT SCALE

Three sets of scores were obtained on the Emotional Development Scale in October, December and March. Average scores were then calculated for Group A and Group B separately, and for the whole school together. Average scores were also obtained for the different sections as well as for the complete scale. These results are given in Table VIII and in Figures 68 and 69. The scores vary somewhat from section to section and present an irregular histogram. This fact is of no quantitative significance since it depends upon qualitative differences in the nature of each section. The specially low scores on Section IV are probably accounted for largely by the fact, that children gain points in this section for things they actually have done, whereas in the other sections they gain points chiefly for the things they have not done.

The scores for Group B are higher than those for Group A on all sections except Section IV, Delight, and V, Excitement. In the former case the score for Group B is possibly lowered by one or two unusually solemn children in that group. At the same time there were two or three particularly cheerful children in Group A who raised the score on the "Delight" section for that group. Moreover, Section IV has a larger Part B than any other section in the Emotional Scale. Children in Group B are usually scored on several items in addition to those used for Group A. They are therefore rated on a somewhat different scale from the one on which the younger children are rated. This is especially true in the case of Section IV.

TABLE VIII
GROUP AVERAGE EMOTIONAL DEVELOPMENT SCORES

	Group A.	Group B.	Whole School.
Section I	78	82	81
Section II	79	87	84
Section III	71	85	79
Section IV	59	57	58
Section V ¹	74	72	73
Section VI	85	87	86
Complete scale	74	78	76



FIGURES 68 and 69.—Average Scores obtained by Groups A and B respectively, on the separate sections of the Emotional Development Scale.

There are so few items in the B parts of the other sections that older children score higher than the younger ones on these regardless of the slight difference in the number of items on which they are scored.

¹ Five items, 11 to 15, in Section V were not scored in this series of studies.

The fact that Group B scored slightly lower than Group A on Section V, Excitement, is most probably due to the fact that five items of the section were omitted from the forms on which the children were scored. These were items eleven to fifteen, all of which describe behaviour more characteristic of the excitement of younger than of older children. The items had been omitted to save duplication as similar behaviour is described again in items 26, 29, 30 and 31 in reference to different circumstances. This proved to be false economy, since it allowed the child who showed excitement in inhibited behaviour to gain more points than the child who showed excitement in restless activity. The omission of these items has not only biased the scores of Section V in favour of the younger children, but it has biased the scores on the complete scale to a lesser extent. The probable average score on the complete scale for Group A, had the items not been omitted, would be 73, and for Group B, 79.

The average scores obtained by all the children during the different months showed increase with time. The average scores for the school in October and December 1928 and in March 1929 were 74, 77 and 79 respectively. Since all but three of the children were the same on each occasion of scoring, this fact suggests that the scores on the scale indicate development in spite of the many interfering factors.

Results according to Age.

A very slight increase in score with age was noticed when the average scores were found for half-year age groups. These are given in Table IX. The increase in score with age, however, is only apparent up to three and a half years of age. This may be accounted for partly by the fact that the school environment presents more emotionally disturbing situations to the new-comer and the young child than it does to the older child. This fact is illustrated also by the results in Table X. Children who have been at school four to six months score noticeably higher on the Emotional Scale than do those who have attended

TABLE IX
AVERAGE EMOTIONAL SCORES ACCORDING TO AGE

	2-6 to 2-11 years.	3-0 to 3-5 years.	3-6 to 3-11 years.	4-0 to 4-5 years.	4-6 to 4-11 years.
Complete scale	64	76	79	77	78

school only three months or less. Children who have attended school for six months or more show, on the average, little difference in their scores.

TABLE X

AVERAGE EMOTIONAL SCORES ACCORDING TO SCHOOL ATTENDANCE

0 to 3 months.	4 to 6 months.	7 to 9 months.	10 to 12 months.	13 to 15 months.	16 to 18 months.
65	75	78	78	77	81

Individual differences in score on the Emotional Scale overshadowed the developmental differences even more than they did on the Social Scale. This is probably largely due to the fact that the items in the Emotional Scale were not so well selected from the point of view of development as those in the Social Scale. This again is dependent upon the fact that developmental differences are less noticeable than individual differences in the emotional behaviour of children. The emotional training of children is apparently less standardized than social training, and emotional development seems to be more disturbed by single chance events than social development. The actual range of individual scores obtained on the two scales differed only slightly. The range on the Emotional Scale was between 54 and 89, with 75 per cent. of the scores falling between 65 and 85.

The separate items on the scale were studied from the point of view of their developmental significance. All the (1), (0), and (—) marks scored against each item by the children in Group A and Group B respectively were counted in the months of October and December. The results showed that there were about ten or fifteen items in each section which were more significant from the point of view of development than the others. The remaining items were chiefly of value in showing individual variations in emotional response. Seventy-five of the more significant items—that is, those against which Group B children scored more (1) or fewer (0) marks than Group A children—are marked with an asterisk in the scale given in Chapter VIII. These items, together with the twenty-five selected from the Social Scale, might constitute a short, practical Social and Emotional Development Scale of a hundred items.

In each section there were one or two items on which younger children gained more points or fewer zeros than the older

children. In Section I, for instance, on item 30, "Has changed tears to smiles of own accord in a few seconds", Group A children gained more points than those of Group B. This may have been due to the fact that the younger children cried more frequently than the older ones. There were thus for them more instances in which tears might be changed to smiles. The older children shed tears only very seldom. In Section II, Group B children scored slightly more zeros than the little ones against item 27, "Has approached strange animals unhesitatingly". This may have been because the older children had more opportunity to meet strange dogs than the little ones, who remained in the yard when the bigger ones were taken out for walks.

In Section III, Group A children scored fewer zeros than Group B on item 25, "Has not frowned when work interfered with or toys taken". Possibly this shows a real age difference—namely, that older children tend to frown in anger more than the little ones. If there were a B part to this section, item 25 should be put into it, but it seems scarcely worth while to make a B part for one item. Studies on a larger number of children, moreover, will probably reveal that frowning in anger occurs earlier than three and a half years.

Item 25 in Section IV, "Has smiled back when smiled at", also applies more to the little ones than the older ones. The former are still at the stage of imitating simple movements, while the latter are learning to concentrate on specific forms of activity and to show interest in particular objects. Their smiles are determined more by humorous associations and spontaneous delight than by simple imitation. Item 25 should preferably be in a part only for children under three or three and a half years of age.

The younger children also scored more points or fewer zeros than the older ones on items 27, 28 and 31 of this section. They stood beside and embraced familiar adults more often than the older children. This is probably because they are still at the stage of dependence upon adults. They want the attention and fondling they have been accustomed to as babies. The little ones also stood close beside strangers more often than the older children. This may have been determined by curiosity as well as a desire for adult attention. Those who have become accustomed to the school situation take little notice of visitors and observers. Although the above results

indicate that items 27, 28 and 31 as well as 25 favour the younger ones slightly, it seems desirable to leave these items in the scale for the purpose of showing individual differences. Another group of young children, moreover, might show more fear of strange adults than curiosity and interest in them.

There are several items in Section V, Excitement, on which Group B children scored more zeros than Group A children. These were 19, 20, 21, 23, 24, 32 and 33. All of these refer to roughness, carelessness and extreme noisiness as a result of delighted excitement. It has already been mentioned that this behaviour is more characteristic of the older nursery school children than of the younger ones. It seems advisable, however, to leave these items in Part A of the scale, since they apply to some of the younger children; and subsequent studies on other groups may show less age difference on these items.

There were so few zeros scored by either group against the items in Section VI, except those which refer to thumb- and finger-sucking, that it is difficult to make any statement with regard to the developmental significance of the majority of the items. However, on the basis of only very few scores, perhaps it may be said that older children twisted their fingers or clothing when finding a task difficult on more occasions than the younger ones. They also showed more mannerisms when speaking to an adult. And they made grimaces more frequently and showed a greater variety of mannerisms when unoccupied than did the little ones. That is, in terms of score, Group B children gained more zeros than Group A on items 13, 19, 22 and 26. These items may be left in Part A of the scale, at least provisionally, until more results are available to show whether they belong more to Part A or B.

Results according to Sex.

Practically no difference was shown between the average scores of the two sexes on the complete Emotional Development Scale. Slight differences were shown, however, between their scores on certain sections. Table XI gives the average scores for the same eleven boys and ten girls whose results on the Social Scale were presented in Table VI. It will be seen that the boys in Group A scored less than the girls in that group on Section III, Anger. They scored higher than the girls on Section IV, Delight, but less again on Section V,

Excitement. Group B boys scored higher than the girls in Group B on Section I, Distress, and Section IV, Delight, but they scored less than the girls on Section V, Excitement. On other sections the boys and girls scored much alike. These results mean that the particular boys studied were more susceptible to outbursts of anger than the girls, more cheerful and more easily excited to noisy activity. The girls, on the other hand, were less readily angered or excited, and less cheerful than the boys. The older ones especially showed more distress than the older boys.

TABLE XI
AVERAGE EMOTIONAL SCORES ACCORDING TO SEX

BOYS				
	Group A.	Group B.	Both Groups.	
Section I . . .	79	85	83	
Section II . . .	80	87	84	
Section III . . .	67	84	78	
Section IV . . .	63	61	62	
Section V ¹ . . .	68	69	69	
Section VI . . .	88	87	87	
Complete scale . . .	74	79	77	

GIRLS				
	Group A.	Group B.	Both Groups.	
Section I . . .	78	79	79	
Section II . . .	78	88	83	
Section III . . .	74	87	80	
Section IV . . .	56	51	54	
Section V ¹ . . .	79	76	77	
Section VI . . .	83	87	85	
Complete scale . . .	75	77	76	

The results of the two sexes on the individual items of the scale showed some interesting differences similar to those indicated by the composite scores. In Section I, Distress, the boys gained fewer points or more zeros than the girls on items, 10, 11, 17, 21, 24, 35, 37, 39, 40, 41 and 45. The girls, on the other hand, gained more zeros than the boys on items 12, 14, 18, 28, 31, 33, 34 and 43. In brief, this means that the boys cried over little annoyances more frequently than the girls. They also exclaimed angrily and complained of offenders when materials were taken or work destroyed. The girls cried more from discomfort and in anticipation of unpleasantness. They complained of disliked events, and they remained silent and

¹ Five items, 11 to 15, in Section V were not scored.

inactive after falling or when their materials had been removed on more occasions than did the boys.

Very little difference between the sexes was shown in Section II, Fear. The boys gained fewer points or more zeros than the girls on items 7, 19, 30 and 35. That is, more boys than girls were startled by noises, and more boys than girls in Group A avoided certain mechanical toys. Some of the boys were more hesitant than the girls in climbing to the top of the jungle gym. And lastly, more boys than girls showed fear of reproof by refraining immediately from mischief when an adult appeared. The girls gained fewer points or more zeros than the boys on items 8, 21, 23, 27 and 28. They held themselves more stiffly when facing a new situation. They showed less curiosity and more timidity in exploring unknown rooms ; and they showed more fear of dogs than the boys by drawing away or failing to approach them.

There were a number of items in Section III, Anger, on which the boys gained fewer points or more zeros than the girls. These were 4, 5, 8, 9, 18, 21, 22, 24, 25, 26, 27, 34, 35, 39, 40, 42, 43 and 44. The girls, on the other hand, gained fewer points or more zeros than the boys on items 11, 19, 37, 41 and 45. There is scarcely need to repeat all these items at length here, as they can be picked out easily from the scale in Chapter VIII. The chief difference between the results of the two sexes on this section lies in the fact that the boys showed more aggressive pugnacity, while the girls occasionally screamed and flushed in anger. Also the girls took somewhat longer to recover from their anger ; and more girls than boys showed hastiness with difficult tasks.

In Section IV, Delight, the boys gained fewer points or more zeros than the girls on items 16, 27, 33, 35, 43, 44 and 45. That is, fewer boys than girls exhibited their new clothes or possessions. Fewer boys, also, would stand or sit beside some familiar adult, join in group singing or sit beside and take care of the babies in the school. The girls gained less marks or more zeros than the boys on items 3, 6, 7, 10, 11, 12, 14, 18, 19, 20, 22, 25, 28, 29, 39 and 42. In short, the girls showed less spontaneous delight than the boys in a number of ways, but they took more interest in clothes and possessions ; and more girls than boys took delight in fondling and assisting the babies. As in the case of all the other sex differences mentioned, these may have been characteristics only of the

particular sample of children studied. Another group might possibly show the opposite characteristics.

The scores on the separate items in Section V demonstrated again that more boys than girls showed excitement in noisy activity. Boys gained fewer points or more zeros on items 16 to 25 inclusive, and on items 27, 28 and 32. The girls, on the other hand, gained more zeros on items 28, 31, 35 and 36. More girls than boys, therefore, showed excitement by eating less dinner than usual and by bursting into tears. More girls than boys, also, stopped work and remained stiff and speechless when observers were present.

The sex differences between scores on Section VI, Mannerisms, were less marked than for other sections, largely because so few zeros were scored in this section. However, the boys scored one or two more zeros than the girls on items 10, 20, 22, 23, 24 and 33. While the girls scored more zeros than the boys on items 13, 15, 18, 26 and 27. That is, more boys than girls sucked their thumbs, made grimaces, jumped up and down, manipulated their genitalia, and had slow and halting speech. More girls than boys showed self-consciousness by twisting their fingers or clothing and by bending their heads when observed, when reprimanded, or when speaking to an adult.

Comparison with Intelligence Test Results.

The average scores on the Emotional Development Scale showed a very slight negative correlation with intelligence test results. The rank difference correlation coefficient between the average scores on the complete scale for three months and Stanford-Binet I. Q. was $-.3$. The correlation coefficient with Stutsman Performance scores was $-.4$. These coefficients have little or no statistical significance since the cases were so few. They suggest, however, that the more emotionally unstable among the children studied were the brighter ones in intelligence.

The Emotional Scores of "Only Children".

There was no noticeable difference between the scores on the Emotional Scale of the ten "only children" in the school and the others who came from larger families. Both on the complete scale and on the separate sections, as many of the "only children" scored above as below the average for their school group.

CHAPTER XVII

A PRE-SCHOOL CHARACTER RATING CHART

WHILE experiments were being made with the Social and Emotional Development Scales, a more practical rating chart was devised for the use of teachers and other members of the nursery school staff. It was hoped that this chart would be a help to the staff in estimating the characters of the children and in following their character development from time to time. Since social and emotional development form an integral part of general character development this rating chart represents another method of approach to the main topics of discussion in this book. In the Development Scales a record is made of actual observations, while on the Rating Chart only evaluations of behaviour or opinions are recorded. On the other hand, only one observer makes observations and scores the Development Scales, while several observers make ratings on the Character Chart.

A comparison of the results obtained from the use of the Character Rating Chart and the Social and Emotional Scales, on the same children during the same period of time, show some interesting points of similarity and a few differences. These will be better appreciated after a description has been given of the Character Rating Chart and the method of its construction.

METHOD OF CONSTRUCTION OF THE CHART

Since the aim in making the character chart was to create something which would be practical and useful to nursery school teachers who had had little or no training in psychology, there were three facts necessary to bear in mind. First, the chart would need to utilize expressions that would be readily understood by the teachers and would mean the same to all. Secondly, persons unused to making scientific observations of people tend to form and give opinions rather than to see and

describe facts of behaviour; and thirdly, the statements of these persons are usually coloured by moral and social evaluation. Parents and teachers not trained in scientific methods can scarcely be relied upon to make unbiased statements or judgments with regard to children's behaviour.

In order to meet the above difficulties it was decided to make a rating chart which would utilize the normal tendencies, to give opinions and to evaluate, rather than have them as interfering factors in a more scientifically exact measuring scale. To offset the bias of one individual it was decided that the children should be rated by at least three or four raters who were frequently in contact with the children. The teachers' own wording was used in the chart, as it was found by actual experiment that there was less difference in the meanings they ascribed to the more common though vague terms of popular speech than to the more definite but less familiar terms of the psychologist.

Lists of adjectives and statements describing children's character and behaviour were drawn up by the writer and the senior teacher. From these items were selected all those which would tell something it was desirable to know about a child's character, apart from intelligence and skill. Although some of the items indicated aspects of temperament, the more general term "character" was considered best as a heading for the list. Among the items were adjectives qualifying behaviour, such as "affectionate", "rough", "trustworthy", and statements about behaviour, such as "plays alone", "shows off intrusively", which could not be put satisfactorily into adjective form. Synonyms and statements describing similar aspects of character were eliminated, also phrases describing character types rather than traits. Long phrases were shortened so as to fit into a compact form or chart.

Finally, fifty concise items were selected which described different aspects of a child's character of which the teachers desired to have some estimate. These were arranged as alternative statements or characteristics in paired opposites, the more socially desirable characteristics being placed first. The paired items were grouped roughly under three headings, social, individual (which was later changed to personal) and emotional. The first half of the social group contained items referring to a child's relations with other children, and the second half contained items referring to his relations with

adults. Photographic illustrations of behaviour included in these items may be seen in Figures 70 to 73 and 76 to 79.

Twenty duplicate charts were typed, one for each child in the school. The members of the school staff who came into frequent contact with the children then rated each child on the chart according to directions which are given below. No standard of comparison was suggested, neither child to child nor group order-of-merit. The raters were simply required to mark a stroke for each item where the first alternative applied more nearly to the child, a zero where the second alternative applied better, and both a stroke and a zero where both items applied equally well. Dashes were to be placed against doubtful items. By this means the teacher could see roughly at a glance the distribution of strokes and zeros on the chart apart from numerical scores. Scores, however, were obtained by allowing a point for each stroke, half a point for each stroke and zero, and nothing for a zero. Percentage scores based on the number of items marked (i.e., omitting all doubtful items marked —) were calculated and the average of the percentage scores for each rater was found. This average was taken as the Character Rating Score for each child. After a few trials it was found necessary to omit from the average the score of any rater who had marked — against ten or more items, as such scores were too unreliable and were found to vary considerably from the scores of other raters.

After several ratings had been made at intervals of one or two months, conferences were held with the staff and the chart was revised. Some of the items were eliminated as being too ambiguous and difficult to rate, some were re-phrased to make them more definite, and one or two new ones were added. Wherever there had been considerable variation in scoring among the staff the items were carefully checked in order to detect ambiguities in meaning. The social desirability of the alternative characteristics in each item was considered by the staff, and the items were again arranged so that, in the opinion of all, the first alternative represented the more desirable characteristic. Tendencies of the staff to be biased in their ratings of different children were noticed, but when the estimates of all four raters were pooled these tendencies were seen to be counterbalanced to some extent. The revised form was used again in the Nursery School, ratings being made on the children at intervals of one or two months.

The complete chart in its final form is given below.

THE PRE-SCHOOL CHARACTER RATING CHART

SOCIAL.

1. Plays with others or plays alone
2. Leaves others alone or interferes
3. Gentle or rough with others
4. Helps or does not help other children
5. Keeps order or creates confusion
6. Studies or ignores others' behaviour
7. Leads or follows older children
8. Defends or does not defend own rights
9. Popular or not popular
10. Not domineering or domineering
11. Unselfish or selfish
12. Sympathetic or not sympathetic
13. Affectionate or not affectionate
14. Co-operative or not in routine
15. Not very talkative or very talkative
16. Not very silent or very silent
17. Unobtrusive or shows off intrusively
18. Does not seek, or seeks attention
19. Adjusted to, or reacts against authority
20. Obedient or disobedient
21. Sensitive or indifferent to criticism
22. Trustworthy or not in adult's absence

PERSONAL.

23. Independent or dependent
24. Self-confident or not self-confident
25. Energetic or lethargic
26. Quiet or noisy
27. Quick in action or slow in action
28. Persistent or gives up easily
29. Careful or careless
30. Purposeful or aimless
31. Concentrates or is easily distracted
32. Questioning or incurious
33. Not destructive or destructive
34. Original or not original in play
35. Imaginative or unimaginative

EMOTIONAL.

36. Cheerful or grave
37. Not variable or variable in mood
38. Spontaneous or restrained
39. Not self-conscious or self-conscious

40. Not nervous or nervous
41. Not deceptive or deceptive
42. Not excitable or excitable
43. Controls tears or cries easily
44. Venturesome or timid
45. Little or much disturbed by observation
46. Deliberative or impulsive
47. Does not show temper or shows temper
48. Does not sulk or sulks.
49. Patient or impatient
50. Forgiving or revengeful

RESULTS ON THE CHARACTER RATING CHART

The Character Rating Chart was used in the McGill Nursery School at various intervals for over two years. Only those results which were obtained during the session 1928-29 are given in the tables in this chapter, for comparison with the results obtained on the Social and Emotional Development Scales during that same period. The earlier results were published in an article in the May-June 1928 number of the *Psychological Clinic*,¹ and they differ only very slightly from those quoted below.

Character ratings were made for all children in the school by the two teachers, the director's assistant, and the psychologist, in May, October and December 1928 and in March 1929. The average percentage scores gained by Groups A and B of the children and the whole school on these four occasions taken together are given in Table XII and in Figures 74 and 75. The percentage scores obtained on the social, personal and emotional parts of the chart are also given separately. Group B scored higher than Group A on the whole chart and on the social and personal parts of it. But they scored lower than Group A on the emotional part of the chart. This means probably that there were two or three children in Group B who were somewhat emotionally unstable.

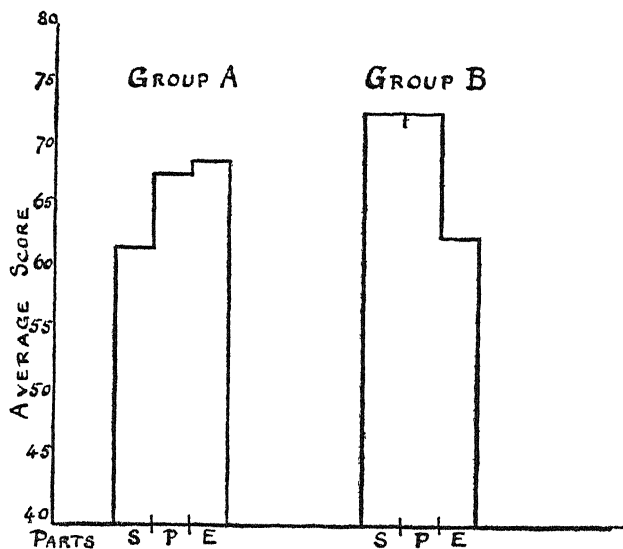
The scores obtained by the whole school on the complete chart in the successive months showed slight increase with time. As already mentioned, the same children were attending the school in October and December 1928 and in March 1929. Since the scores for these months were 68, 69 and 73 respectively, they indicate development on the part of the children

¹ Complete reference to this article will be found in the Bibliography.

APPLICATION OF THE SCALES

TABLE XII
GROUP AVERAGE CHARACTER SCORES

	Group A.	Group B.	Whole School.
Social	62	73	68
Personal	68	73	71
Emotional	69	63	66
Complete chart	66	71	69



FIGURES 74 and 75.—Average Scores obtained by Groups A and B respectively, on the separate parts, Social, Personal, and Emotional, of the Character Rating Chart.

in the traits included in the chart. The range of individual scores on the Character Chart was very similar to the range of scores on the Social and Emotional Development Scales. The Character Rating scores ranged from 48 to 91, and 75 per cent. of them fell between 60 and 80.

Results according to Age.

The average scores on the chart gained by children in half-year age groups also show increase with age. These are given in Table XIII. The rise in score with age is not as marked as it was in the case of scores obtained during the session 1927-28. At that time the average scores for the same half-year age groups from two and a half to five years were, 61, 71, 64, 74 and 78 respectively. The drop in score at the three

and a half to four year age-level may be explained partly by the fact that there were several problem children in this age group. It may also be due partly to the promotion of three and a half year old children from Group A to Group B in which they would be compared with older instead of younger children by the raters.

The same problem children who were in the three and a half to four year group in 1927-28 were included in the two higher age groups between four and five years in 1928-29. This fact probably accounts for the relatively low average scores of the older children in the 1928-29 results. It seems probable that with a different selection of children both Character Rating scores and Social and Emotional Development scores for children over four years of age would be higher than the scores quoted in this book. On the other hand, the scores for children under three and a half might be lower for a different set of children. There were two or three particularly well-adjusted and well-poised children in school Group A who no doubt raised the average scores for the younger children.

TABLE XIII

AVERAGE CHARACTER SCORES ACCORDING TO AGE

	2-6 to 2-11 years.	3-0 to 3-5 years.	3-6 to 3-11 years.	4-0 to 4-5 years.	4-6 to 4-11 years.
Social . . .	60	66	68	70	76
Personal . . .	73	67	69	70	74
Emotional . . .	67	67	67	63	59
Complete chart	65	67	68	68	73

Table XIV gives the average Character scores according to school attendance. These scores increase only very slightly with the number of months the children had attended school. This is probably because one or two new children were admitted into Group B to fill vacancies, when there were no children exactly the right age to graduate from Group A. The average scores quoted in this table, therefore, are computed from the scores of children of various ages, although for the most part children who had attended school for less than six months were children in the younger age group.

TABLE XIV

AVERAGE CHARACTER SCORES ACCORDING TO SCHOOL ATTENDANCE

0 to 3 months.	4 to 6 months.	7 to 9 months.	10 to 12 months.	13 to 15 months.	16 to 18 months.
66	66	69	70	72	72

Results according to Sex.

The average scores on the complete Character Chart and on the three parts of it were computed for the boys and girls separately. These results show rather greater sex differences than were indicated by Social and Emotional Development scores quoted in Tables VI and XI. The average Character Rating scores are given in Table XV for the same eleven boys and ten girls whose Social and Emotional Development scores were given in the above-mentioned tables. It will be observed that the girls scored higher than the boys on the complete chart and on the social and personal parts of it, but they scored lower on the emotional part. These results are similar to those on the Social and Emotional Development scales, but slightly more exaggerated.

TABLE XV
AVERAGE CHARACTER SCORES ACCORDING TO SEX

Boys				
	Group A.	Group B.	Both Groups.	
Social	53	72	65	
Personal	66	66	66	
Emotional	72	69	69	
Complete chart	63	71	68	
GIRLS				
	Group A.	Group B.	Both Groups.	
Social	69	74	71	
Personal	70	82	76	
Emotional	67	56	62	
Complete chart	69	72	71	

The most marked differences in Character score are between the scores of Group A boys and girls on the social part, 53 and 69 respectively, and between Group B boys and girls on the personal part of the Chart, 66 and 82 respectively. In both these instances the girls score higher than the boys. On the other hand, Group B boys score considerably higher than the girls on the emotional part of the chart, 69 against 56. These results suggest that there were some boys in Group A who were particularly unadjusted socially. There were boys in Group B whose personal characteristics were not well developed, and there were some girls in this group who were emotionally unstable.

The fact that the Character Rating scores show somewhat

greater sex differences than the Social and Emotional Development scores may perhaps be due to the bias of the personal opinions of the raters upon the Character scores. It may also be due to the fact that the Social and Emotional scores are partly determined by single chance events. Hence the general trend of the children's behaviour may be overshadowed in the scores by marks gained for rare occurrences in behaviour. On the other hand, the scores obtained on the Character Chart are determined by the opinions of observers, and these opinions are influenced largely by the general trend of the children's behaviour. It is possible that the Character Rating Chart may serve as a better diagnostic aid than the Development Scales in searching out the general nature of any individual child's behaviour problem. But the Social and Emotional Development Scales would probably be of greater assistance in analysing the particular nature of that problem.

Comparison with Intelligence Test Results.

The average Character Rating scores for the months of October, December and March together were compared with Stanford-Binet I. Q. and Stutsman Performance scores. There was practically no correlation in either case. The rank difference coefficient of correlation between average scores on the complete Character Rating Chart and Stanford-Binet I. Q. was $+0.2$. The coefficient of correlation between Character scores and Stutsman Performance scores was -0.2 . The Character Rating scores obtained during the previous session 1927-28 gave somewhat higher positive correlation with Stanford-Binet I. Q., $+0.5$, and zero correlation with Stutsman Performance scores.

It was suggested when the 1927-28 results were published that the slight positive correlation between Character scores and Stanford-Binet I. Q. was due to the fact that the Character Chart and the intelligence tests were measuring in part the same things. The results on the Binet tests are influenced to some extent by the social and emotional adjustment of the various children to the test situation. The traits included in the Character Chart also involve certain aspects of general intelligence.

Especial care was taken in giving both Stanford-Binet and Performance tests during 1928-29 to have each child perfectly at ease in the test situation. For the most part children

were only taken for examination when they volunteered to go. Others were taken if they responded readily to the suggestion to see what toys the examiner had upstairs. Tests were also given very much in the order in which the children chose them, and Performance tests were interspersed with Binet tests. Thus variety added zest to the examination. This special care in the administration of intelligence tests may have accounted partly for the slightly lower correlation between I. Q. and Character scores in 1928-29 than in 1927-28. The lower correlation, on the other hand, may be entirely due to chance sampling in such a small number of cases.

The rank difference coefficients of correlation between Stanford-Binet I. Q. and the 1928-29 average scores on the social, personal and emotional parts of the Character Rating Chart were also found. These were $+0.2$, $+0.8$, and -0.5 respectively. There was thus only a very slight positive correlation between I. Q. and scores on the social part of the Character Chart. This correlation is similar to that found between I. Q. and scores on the Social Development Scale. There was marked positive correlation between I. Q. and scores on the personal part of the Character Chart. This part evidently contains a number of traits which are also involved in general intelligence. Lastly, there was a negative correlation between I. Q. and scores on the emotional part of the chart. This means that the brighter children were more emotionally unstable than the others. A similar result though less marked was found when scores on the Emotional Development Scale were compared with intelligence quotients.

Comparison with Social and Emotional Development Scores.

There was found to be a fair degree of correlation between the average scores for all the children on the complete Character Rating Chart and on the Social Development Scale. There was slightly better correlation between the average scores on the social part of the Character Rating Chart and the Social Development scores. The rank difference coefficients of correlation between total Character Rating scores and Social Development scores in October and December were $+0.6$ and $+0.7$ respectively. The coefficients of correlation between the scores on the Social part of the Character Rating Chart and Social Development scores for the same months were $+0.7$ and $+0.7$, and for October, December and March taken

together, $+0.8$. This means that the social part of the Character Chart and the Social Development scale are measuring very much the same things. It also means that the raters were fairly well agreed in their opinions as to the social behaviour of the children, and the opinions must have been based on actual facts of behaviour.

The average scores on the Emotional Development Scale also gave positive correlation with scores on the Character Rating Chart, but these were very small and probably of doubtful significance for so few cases. The rank difference coefficient of correlation between the average scores on the total Character Rating Chart and the Emotional Development scores for the months of October and December were $+0.3$ and $+0.4$ respectively. The correlations between the average scores on the emotional part of the Character Rating Chart and the Emotional Development scores for October and December were $+0.3$ and $+0.4$, and for October, December and March taken together, $+0.3$.

These low correlations are probably due to the fact that many aspects of emotional behaviour, that are not scored in the emotional part of the Character Rating Chart, are scored in the Emotional Development Scale. Somewhat different things are being measured in each case. Moreover, the raters did not agree so well among themselves concerning the emotional traits of the children as they did concerning the social traits on the Character Rating Chart. It is, for instance, more difficult to judge whether a child is self-conscious or nervous than whether he is domineering or talkative. The latter traits represent more definite and well-known forms of behaviour than the former. Nevertheless, the correspondence between the results on the Emotional Development Scale and the emotional part of the Character Chart in relation to school group, sex, and intelligence, demonstrate that these two scales measure roughly at least the same sort of thing.

CHAPTER XVIII

INDIVIDUAL STUDIES

THE composite scores obtained by different groups of children on the Development Scales and on the Character Rating Chart, presented in the foregoing chapters, give little indication of the value of the scales and chart in revealing individual differences or idiosyncrasies in social and emotional behaviour. The results of a few individual children are therefore given below to show further possibilities of the scales as aids to research in child psychology. It will be seen that even in a group of so-called normal children the scales reveal individual peculiarities and biased trends of behaviour.

Certain of the children studied were found to have a number of behaviour tendencies in common. This fact suggested to the writer that the scales might be of assistance in isolating social and emotional behaviour types, when applied to a sufficiently large number of children. The six children described in the following paragraphs were selected, therefore, for two purposes—namely, to show individual variations as revealed by the scales and to suggest possible behaviour types. The word “type” is here used in the sense in which Kretschmer and others use it to mean a well-defined clinical picture and not the average or typical member of a group. A behaviour type is a group of behaviour elements which occur together and are characteristic of certain children. There may be common or unusual behaviour types, just as there may be ordinary or peculiar physiognomical features.

It is thus not proposed to divide all pre-school children into six types as illustrated by the cases below. There must be an indefinite number of social and emotional types, and these could not all be picked out of a homogeneous group of twenty-eight Canadian children. The cases presented are rather individual studies, one or two of which perhaps may be taken as representative of more general social or emotional

behaviour types. Plans are being made for the study of different groups of children, including problem cases, with the aid of the Development Scales. It seems probable that the results of these studies will reveal more well-defined behaviour types. Such identification of types should be of assistance in the diagnosis and treatment of problem cases in schools and clinics.

These individual studies are not complete "case studies". They are simply individual examples taken from a psychological investigation of two circumscribed fields of human behaviour. In the main they are summary descriptions of the social and emotional traits of certain children, as revealed by the Development Scales at a particular time. Complete psychological studies would include descriptions of other aspects of mental life and behaviour, such as sensory acuity, skills, language, instinctive drives, habits of work and play, habits of attention and so forth. While complete case studies would involve even more; for they should include medical, social and educational histories, and comprehensive physical and mental developmental studies. Most of these would obviously be irrelevant to the main topics of this book.

There are one or two criticisms which might be advanced against the writing of case studies by scientific specialists. In the first place such studies are usually very limited in scope. A specialist in any particular science usually treats the case chiefly from one angle. This may be educational, sociological, anatomical, physiological or psychological in the main. His special field of investigation may be even narrower than this. If he is a psychologist, for instance, he may treat the case chiefly from the point of view of intelligence, or language, or motor skills, or emotion, or instinct, or other aspects of mental life. Moreover, his study will be made at a particular time and under certain conditions. Generalization or far-reaching inferences drawn from such specific instances may be very unreliable, yet they are often made. Case studies which deal only with one or two aspects of an individual and give but cursory glimpses of other aspects may be very misleading. Still worse may be broader studies attempted by persons who have little knowledge and experience in the many fields they discuss.

In a report of a scientific investigation, therefore, case studies have no logical place. If they are done thoroughly

they must contain masses of material irrelevant to the main theme of discussion. Such a digression may, of course, be very interesting, but it is more often tedious and confusing. Accordingly, in the following paragraphs only very little data additional to the results obtained from the behaviour studies is reported.

For the purpose of individual study, histograms of the scores obtained by every nursery school child on the separate sections of the scales were prepared each month. The same child's scores obtained from time to time could thus be readily compared. The shape of the histogram varied more from month to month for some children than for others, and more in the case of Social and Character scores than in the case of Emotional scores. That is, one child would have a relatively low score on Section I of the Social Development Scale in one month, and a high one in another month and so forth. Other children would always score either above or below the average on the same sections.

The salient characteristics of each child, however, were brought out fairly well by the averages of the scores obtained during the three or four months when scorings were made. The histograms of these average scores may perhaps be taken to represent diagrammatically the social and emotional behaviour types of the different children. However, these diagrams will be of little significance in the case of children whose scores vary from month to month. Illustrative examples of composite scores for each of six children are presented in histogram form in Figures 80 to 97. The graphs for the first three subjects, Figures 80 to 88, do not give as true pictures of the behaviour of the children as do the graphs for the other three subjects, Figures 89 to 97. The scores of the former varied month by month more than those of the latter who were older children.

The continuous line histograms in Figures 80 to 97 represent the average scores obtained by each of the six selected children on the Social and Emotional Scales and on the Character Rating Chart. The dotted lines in these diagrams represent the average scores for their school group. Comparison of the continuous and dotted line histograms reveals the individual peculiarities in regard to scores on the separate sections of the scales. For instance, in Figures 81 and 84, subject A has a low score on Section I (Distress) of the Emo-

tional Scale, while subject B has a high score on that section. A is below the average in score on Section III (Anger), while B is above the average, and so on. These individual variations in sectional scores, as well as the differences in scores on the specific items of the scales, are further described with reference to each child.

The ages of the children described below are all given for January 1929 or mid-season. The heights and weights were also computed in this month. The scores on the Social and Emotional Development Scales and on the Character Chart are the averages of the scores obtained in the previous October and December 1928 and in the succeeding March 1929. The intelligence test results were mostly obtained in November and December 1928.

SUBJECT A

Girl. Group A. Age 2 years, 10 months.

Height 36.75 inches. (Normal height for age, 35.80 inches.)

Weight 27.63 pounds. (Normal weight for height, 29.49 pounds.)

Stanford-Binet I. Q. 115.

Median Stutsman Performance score, 87 percentile rank.

Social Development score, 55. (Average score for Group A, 62.)

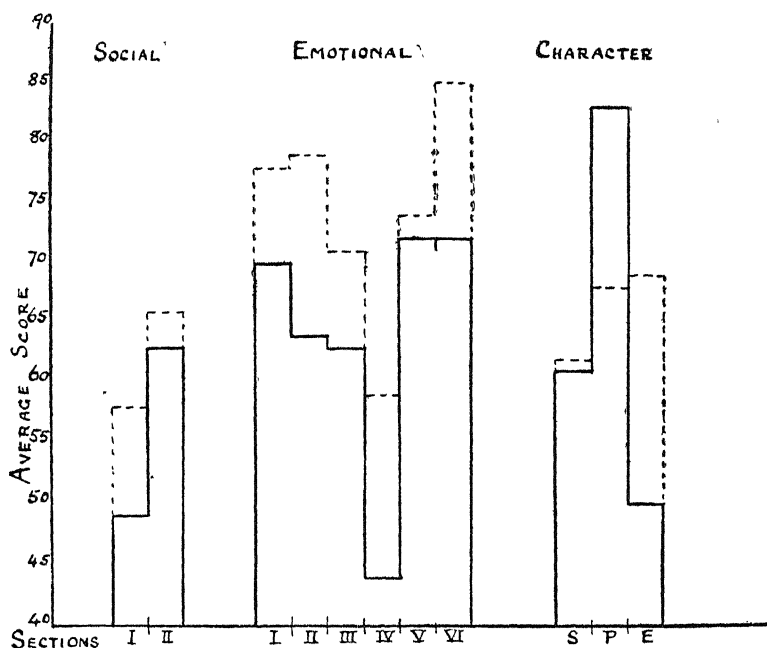
Emotional Development score, 65. (Average score for Group A, 74.)

Character Rating score, 64. (Average score for Group A, 66.)

This little girl was bright and quick in action, but somewhat emotionally unstable. She scored considerably below the average on both Social and Emotional Scales, but only slightly below average on the Character Chart. Her behaviour with regard to children was less socially desirable than her relationship with adults, according to scores on Sections I and II of the Social Scale as shown in Figure 80. Her scores on the Emotional Scale were below the average on all sections, which means that she frequently showed distress, fear, anger, excitement and mannerisms, but seldom delight or affection. Her score on the personal part of the Character Chart was above average, indicating intelligence and perseverance, but her score on the emotional part was again below average.

Her social behaviour was expressed in ordering others about,

SUBJECT A



FIGURES 80, 81 and 82.—The continuous line histograms represent the average scores for the three months obtained by subject A on the Social and Emotional Development Scales and on the Character Rating Chart. The dotted lines indicate the average scores for the same three months obtained by the whole Group A.

trying to correct them and interfering with their work. She frequently claimed others' toys and played alone rather than joined groups of children in play. She waited for adults' help and occasionally showed disobedience. She cried when teased by other children and remained fretful for some time after. During her first months at school she remained silent and passive or cried when others took her toys. She usually also remained silent after a fall. She clung to a teddy-bear she had brought from home and cried whenever she lost sight of it. She held herself stiffly when facing new situations, withdrew to a corner from the group, and avoided certain apparatus and strange animals. She struggled and pouted in anger, and squealed and hit offenders roughly when they interfered with her toys.

Laughter came at rare intervals, though she smiled at times when others laughed. She never laughed either at her own mistakes or those of others, but rather became tearful or angry when the cylinders were put in the wrong holes or other little errors were made. She did not exhibit her work or possessions for appreciation, and she showed little affection either for children or adults. She expressed excited interest, however, in rushing from one occupation to another, and in occasional laughter. She usually stopped work when observers were present, and she showed self-consciousness by bending her head in silence. Nose-picking and thumb- and finger-sucking were her most common mannerisms.

During the time this child was under observation she became less tearful and more vocal in her protests. She became less timid and more aggressive and pugnacious in her reactions. She smiled more frequently at humorous situations, and gradually she came to laugh and jump about with delight as much as other children. At first she seemed to be rather a seclusive unsocial type and an inhibited emotional type, but greater sociability and emotional expressiveness developed with time. If another series of observations had been made two months later than those reported in the foregoing records, a rather different distribution of scores would have been obtained on the scales.

The child was slightly above average height for her age and below the expected weight for such height, in January during the middle of the observation period. If the same physical characteristics correlate with temperamental traits in children as Kretschmer¹ found in the case of adults, the physical type of this child at that time would have led one to expect a schizothymic temperament. Her social behaviour was certainly of a seclusive type and her emotional responses were somewhat inhibited, but on the other hand, she was easily annoyed, distressed and frightened, and she had a number of nervous mannerisms. Three or four months later she became much heavier in proportion to her height and her general behaviour changed as already mentioned. She became active, cheerful and aggressive, more sociable and talkative with children, and her mannerisms appeared less and less frequently. It is perhaps interesting to note that this change

¹ The works of authors referred to in this chapter will be found in the Bibliography.

came about after a new baby had been born into the family, and the child was again looked after by her mother. Previously her father had brought her to school, fetched her home, and generally looked after her.

It is thus even more questionable in the case of children than in that of adults whether one can differentiate them into physical or mental types. The height-weight relationship of children changes from time to time as they grow. Their mental characteristics also change with changing circumstances. Rosanoff suggests that children possess all possible varieties of temperamental traits and that certain of these become fixed with time and particular kinds of experience. He believes that the other traits become inhibited and remain latent until aroused by suitable circumstances, and thus different traits appear on the surface at different times throughout life.

The results of the present study of social and emotional behaviour of pre-school children tend to confirm this theory. Some of these results suggest, however, that bias in certain directions may set in very early, determined either by physiological peculiarities or constant environmental factors. Certain children seemed to have more fixed habits of response than others, and four-year-olds appeared to be more set in their behaviour than the two- and three-year-olds. It seems quite possible that a temperamental bias noticeable at the pre-school age may persist for years or even throughout life. Follow-up studies of many cases, of course, would be needed to show whether this is really so or not. But the chief revelation of the present study is that the temperamental traits of pre-school children are very unstable. The same child may show a variety of traits, and quite different social and emotional behaviour may appear at different times.

SUBJECT B

Boy. Group A. Age 3 years, 2 months.

Height 40.00 inches. (Normal height for age, 37.09 inches.)

Weight 38.63 pounds. (Normal weight for height, 35.44 pounds.)

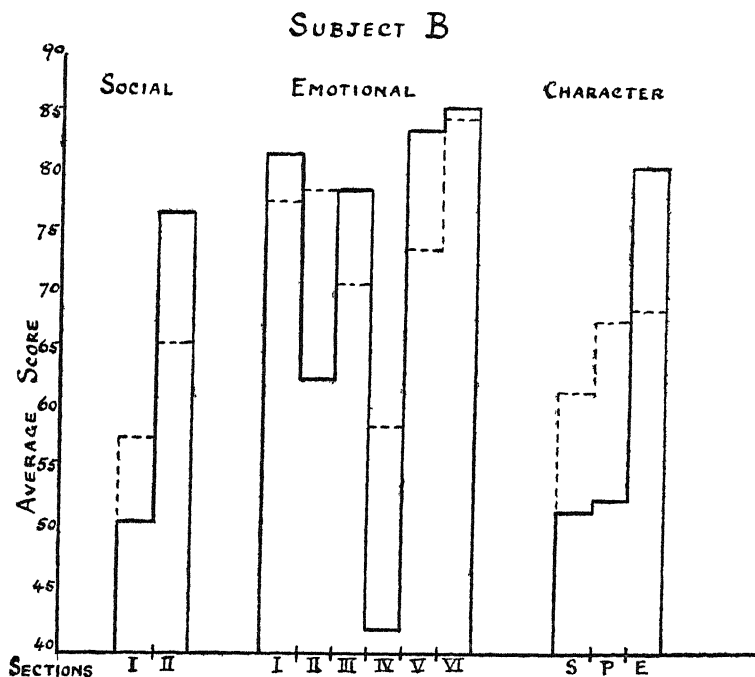
Stanford-Binet I. Q. 100.

Median Stutsman Performance score, 43 percentile rank.

Social Development score, 63. (Average score for Group A, 62.)

Emotional Development score, 75. (Average score for Group A, 74.)

Character Rating score, 62. (Average score for Group A, 66.)



FIGURES 83, 84 and 85.—The continuous line histograms represent the average scores for the three months obtained by subject B on the Social and Emotional Development Scales and on the Character Rating Chart. The dotted lines indicate the average scores for the same three months obtained by the whole Group A.

The scores on the complete Development Scales and on the Character Chart would suggest that this was an average child from the point of view of social and emotional behaviour. But the scores on the separate sections of the scales, as presented in Figures 83, 84 and 85, show certain deviations from the average. The boy was better adjusted to adults but less well adjusted to children than the average child in his group. He was somewhat less tearful and less venturesome than the average child. He showed also less anger, delight and excitement than other children of the group. His scores on the

different parts of the Character Chart indicate that his social behaviour, particularly in relation to other children, was poorer than the average, and that his personal characteristics were below the group average, but that he was much less emotional in his reactions than other children.

The child was above the normal height and weight, somewhat slow and awkward in performance, and not easily aroused. He usually played alone, and for a long time he made little attempt to defend his own right to materials or place when others tried to take them from him. Later he developed a habit of poking, hitting and teasing others. He waited for adult help and showed occasional disobedience. He never cried and generally remained passive and silent after a fall or when others took his toys. He avoided dogs, watched strangers from a distance, and made no attempt to climb to the top of the jungle gym. He showed unusually little spontaneous anger; but he occasionally showed revenge by hitting a child for no immediate reason long after an offence. He seldom laughed or showed delight in specific things. At first he demonstrated little affection, but later he hugged some of the other children rather roughly. He was remarkably undisturbed by visitors or special events and he neither shouted nor rushed about in excitement.

The only specific mannerisms he exhibited were sucking of thumbs, fingers or small objects. But he showed a general tendency towards stereotyped behaviour and repetition of phrases. For weeks he would make the same remarks to other children and adults many times a day. For example, "Mummy's coming for me", and "You like me, don't you?" He would also repeatedly hug or push children when they came near. There were thus aspects of the child's behaviour which suggested that he was an unsociable and an unemotional type. There were other aspects of his behaviour which suggested latent or repressed sociability and some deep-seated emotions. He apparently wanted to be friendly with other children, but had not acquired quite the right technique. The child was becoming more talkative and more aggressive in his behaviour towards the end of the observation period. It seems probable that, as he finds adequate expression for his deeper feelings, the superficial appearance of his social and emotional characteristics will change.

SUBJECT C

Girl. Group A. Age 3 years, 2 months.

Height 39.13 inches. (Normal height for age, 36.63 inches.)

Weight 35.74 pounds. (Normal weight for height, 33.14 pounds.)

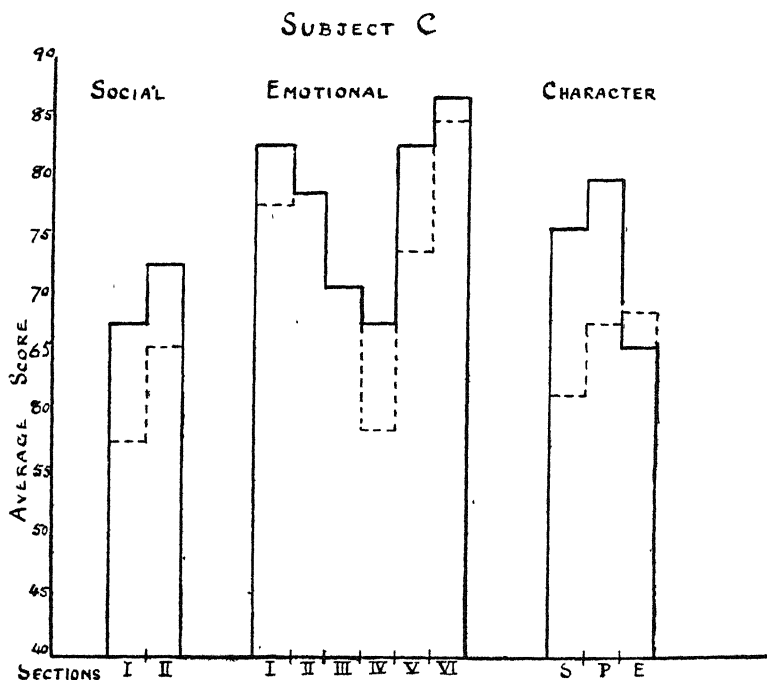
Stanford-Binet I. Q. 128.

Median Stutsman Performance score, 75 percentile rank.

Social Development score, 70. (Average score for Group A, 62.)

Emotional Development score, 78. (Average score for Group A, 74.)

Character Rating score, 74. (Average score for Group A, 66.)



FIGURES 86, 87 and 88 —The continuous line histograms represent the average score for the three months obtained by subject C on the Social and Emotional Development Scales and on the Character Rating Chart. The dotted lines indicate the average scores for the same three months obtained by the whole Group A.

This child scored above the average for her group on both Development Scales and on the Character Chart. The sectional scores given in Figure 86 indicate that her social relations with both children and adults were better than the average. As may be seen from the graph in Figure 87, she showed a little less distress than the average child, but considerably more delight and affection. Her fear and anger reactions were about average for her group. For the most part during the observation period she appeared to be little excited by special events or when roused by noisy children, as is indicated by her score on Section V. But towards the end of the period she showed considerable active excitement. On the Character Chart she scored much above the others on the social and personal parts, but slightly below average on the emotional part.

She was a well-proportioned child, above the normal height and weight. She was sociable and popular, since she played frequently with others without bossing or teasing them. She often went to adults to be petted, but she was independent of their help. She cried occasionally when slightly hurt, and she called out spontaneously when others took her toys or when she fell. She was slightly timid in new situations, but she climbed readily to the top of the jungle gym and showed delighted interest in strangers. She struggled and sobbed occasionally in anger and squealed loudly when her toys were taken.

She laughed frequently, took delight in her possessions and sang little songs to herself. She was particularly affectionate and embraced other children, adults, stuffed animals and dolls. At first she showed only little excitement both apprehensive and joyous in nature; but later she rushed about, giggled and became flushed with delighted excitement when occasion arose. Her chief mannerisms, which only appeared occasionally, were thumb- and finger-sucking, thigh-rubbing, and a tendency to stutter in moments of excitement or annoyance. This last may have been copied from one of her parents who had a hesitating manner of speech.

Here was a healthy, happy and uninhibited child. She was spontaneous and demonstrative in her behaviour, sociable and affectionate. She showed all the various pre-school emotions in slight amounts, but these were expressed satisfactorily. The more disagreeable ones diminished in frequency, while the more pleasant emotions of delight and

affection became more and more dominant. At the same time what few mannerisms she had gradually disappeared.

SUBJECT D

Girl. Group B. Age 4 years, 2 months.

Height 38·63 inches. (Normal height for age, 39·28 inches.)

Weight 32·88 pounds. (Normal weight for height, 32·82 pounds.)

Stanford-Binet I. Q. 131.

Median Stutsman Performance score, 90 percentile rank.

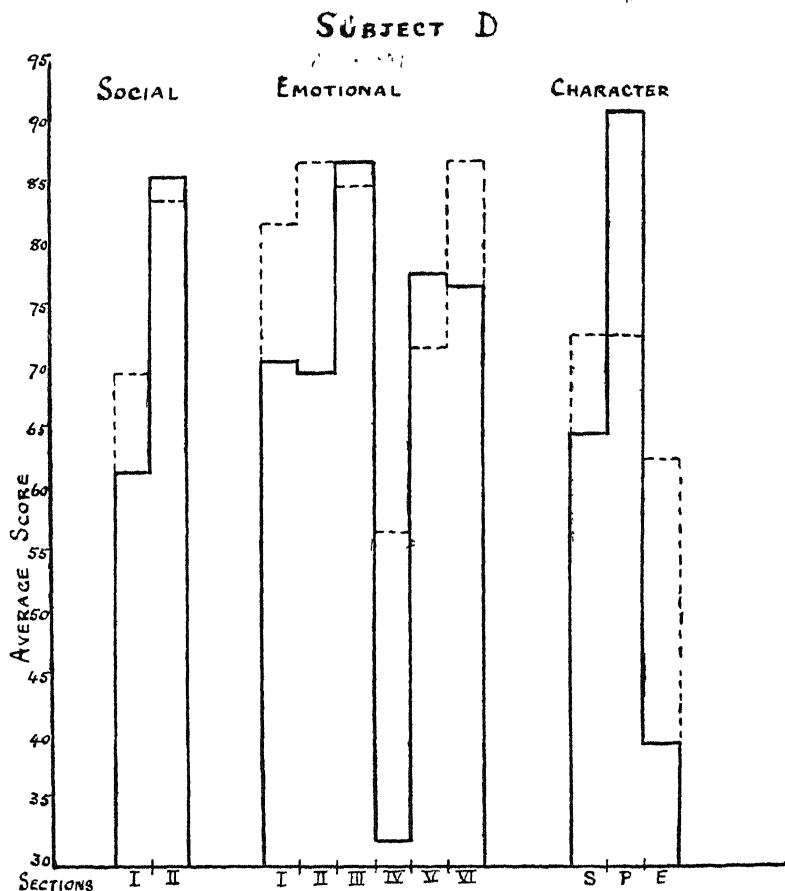
Social Development score, 72. (Average score for Group B, 75.)

Emotional Development score, 68. (Average score for Group B, 78.)

Character Rating score, 65. (Average score for Group B, 71.)

This is a child from Group B who scored below the average of her group on both Social and Emotional Development Scales and on the Character Rating Chart. Her social relations with other children were poor, as shown by her score on Section I of the Social Scale, in Figure 89. The score on Section II, relations with adults, was about average, or a little above. The scores on the separate sections of the Emotional Scale show that she was frequently distressed and afraid. She was not readily excited and she exhibited unusually little spontaneous delight and affection. She was not easily annoyed, but she had a number of nervous mannerisms. Her scores on the social and emotional parts of the Character Chart were below the average, but her score on the personal part was well above average. This indicates that she was clever and persistent, but unsociable and highly emotional.

The child's general appearance presented some interesting features when taken in conjunction with the above findings. She was under-sized, round-shouldered and hollow-chested. She usually stood or walked in a crouched position with knees and head bent. Her eyes were generally wide open and she looked upwards out of the corners, keeping watch intermittently upon all adults in the vicinity without raising her head. She never missed her name when it was spoken, and she showed by her conversation that she had overheard any remarks that adults had made about her in her presence, no matter how softly they were uttered. Here was an apprehensive



FIGURES 89, 90 and 91.—The continuous line histograms represent the average scores for the three months obtained by subject D on the Social and Emotional Development Scales and on the Character Rating Chart. The dotted lines indicate the average scores for the same three months obtained by the whole Group B.

and anxious child who betrayed her temperament in her very posture.

There were a number of other children in the school whose postures and temperamental characteristics seemed to support the theory of modern physical educationists, that there is some relationship between posture and mental attitude. There certainly seemed to be some slight relationship between

posture and social and emotional traits. The self-confident or pugnacious youngsters had straight backs and knees, while timid, anxious or worried children stood with their knees bent. If such relationships between posture and mental attitude were found to exist generally, it should not be argued, of course, that training in posture alone would change the co-existing mental attitudes.

Subject D showed her unsociability with other children by usually playing alone outdoors, by not seeking the approval or help of others, and by offering no assistance herself. She made no appreciative remarks about other children and offered no help to the new child. When she played with other children she generally told them what to do and organized the game. She seldom spoke to adults, but she showed neither marked dependence, nor reaction against adult authority. She cried and complained frequently of dislikes and wept silently for a long time after each disturbance. She stiffened and looked wide-eyed when facing new situations. She withdrew from the group and from dogs, and she told untruths to avoid blame or gain sympathy. She also made excuses to avoid unpleasant tasks or ones which she could not excel in. There were a number of foods she refused, and when urged to get on with her dinner she choked and once or twice vomited.

The child showed no pugnacity, but protested against doing disliked things. Only very occasionally would she laugh, and her smiles were fleeting and furtive. She never embraced another child, but she embraced her mother sometimes on the latter's arrival at school to fetch her home. The only kind of excitement she showed was speechless stiffening when observers were present, and occasional hastiness with her occupation. Her most frequently appearing mannerisms were bending the head and holding her body stiffly, twisting of fingers, and regurgitating food.

One very noticeable characteristic of this child was the habit of repeating certain feelingful ideas. She had an unusually large vocabulary, and she did not repeat simple phrases or sentences automatically like subject B. She re-expressed the same idea in a number of different ways. For example, at various intervals of the day she would say, "I don't like carrots", or "Tell them not to have carrots", or "I don't want carrots for dinner". Then at dinner-time she would say at intervals during the meal, "I don't like what's inside"

(referring to a sandwich), or "I'm not going to eat that", or "I would prefer not to eat that, it comes up on me", or "I don't like it", and so on. Although at times she would be very verbose in her complaints, at others she would suffer for a long time and weep in silence without telling her troubles.

One day she was discovered weeping in the sand-pile and holding her eye. She refused to tell what was the trouble when asked sympathetically. Assuming that she must have sand in her eye, she was taken to the doctor to have it examined, but no sand was actually found in it. She continued to sob, however, all morning. When other children asked solicitously after her trouble she ignored them. She refused to take any interest in watering the plants with the other children. Later, when she was given special encouragement to set the tables for dinner, she took her hand down from her eye and moved about more. It seems probable that the child had hurt her eye in some way in the sand-pile and had become emotionally disturbed through disappointment and fear, because no one was watching to give her immediate attention and sympathy. Later no amount of sympathy and attention from teachers or children could soothe her.

This little girl was the only child of rather middle-aged parents who were both very solicitous for her well-being and intellectual development. The mother was a little deaf and was afraid that she would not always hear the child when she wanted anything. This fear was expressed in an over-determined solicitude for the child. The little girl had come to expect immediate and excessive sympathy from adults. There would therefore be some shock attached to a situation in which such sympathy was not immediately forthcoming, as in the above instance.

The child had also come to derive a certain amount of pleasure from discomfort and complaining. This again was probably due to association with excessive sympathy and special attention at home. When she was waiter at lunch one day, she poured out the other children's milk but left her own cup empty. Later that evening she complained to her mother that she had not been allowed any milk at school. Next morning the mother complained to the teacher in the child's hearing, which flattered her vanity and added fuel to her already strong drive for attention and power.

When she first came to school she was very anxious to show

off and was talkative with adults. When marching to piano music with the others in Group A one morning, she ordered all the others loudly to stop and watch her ; she then marched alone before the audience. After the summer vacation when ^{she} was promoted to Group B she became much more silent and seclusive in her ways. She was then one of the smallest and least competent members of the group in a number of ways. Towards the end of the observation period she was becoming noticeably more spontaneous in her movements. She increased in weight and her posture improved. She played with other children and smiled more readily, but still she seldom laughed. It is possible that when she becomes the older member of the group again, she will grow to be more expressive and cheerful.

During the observation period this child's behaviour was suggestive of a shut-in personality. She was unsociable and self-conscious, complaining, serious, and undemonstrative of affection. She was an inhibited and repressed emotional type. Her emotional reactions, however, were somewhat varied. Her expressions of obsessive ideas suggest a somewhat psychasthenic or anxious type ; while her occasional outbursts of tears, prolonged weeping for attention, and emotional vomiting might be hysterical in character. Here is a case, illustrative of Rosanoff's theory, presenting varied possibilities for later personality development. Under unfortunate circumstances the child might develop into a psychasthenic, or a hysterical psychoneurotic, or even into a paranoid schizophrenic, depending upon the nature of the unfavourable conditions. With favourable circumstances she will develop normally so far as social and emotional behaviour are concerned. At present she is unusually bright, but egoistic and somewhat schizothymic in temperament.

SUBJECT E

Boy. Group B. Age 4 years, 6 months.

Height 42.00 inches. (Normal height for age, 40.47 inches.)

Weight 43.94 pounds. (Normal weight for height, 38.37 pounds.)

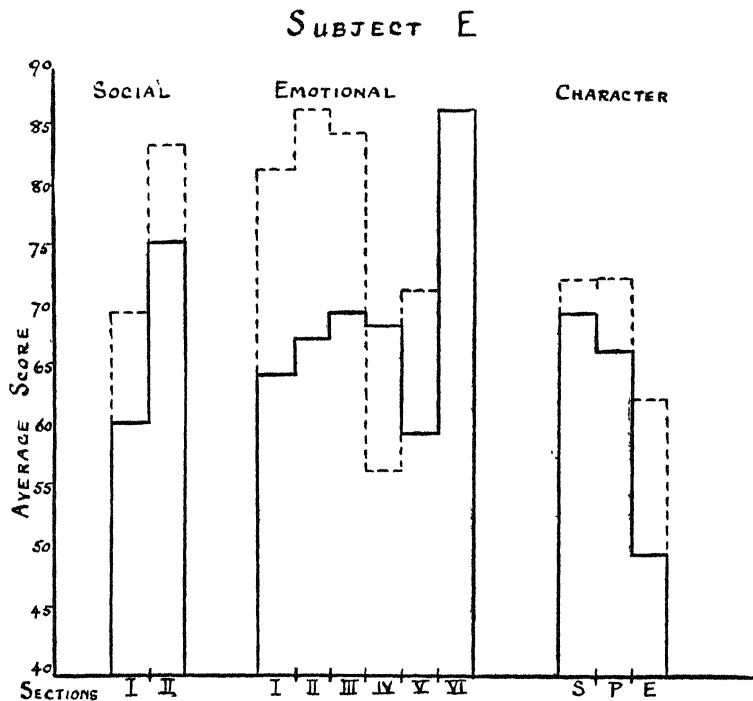
Stanford-Binet I. Q. 108.

Median Stutsman Performance score, 65 percentile rank.

Social Development score, 67. (Average score for Group B, 75.)

Emotional Development score, 70. (Average score for Group B, 78.)

Character Rating score, 64. (Average score for Group B, 71.)



FIGURES 92, 93 and 94.—The continuous line histograms represent the average scores for the three months obtained by subject E on the Social and Emotional Development Scales and on the Character Rating Chart. The dotted lines indicate the average scores for the same three months obtained by the whole Group B.

This boy scored below the average on both Social and Emotional Development Scales and on the Character Rating Chart. He scored less than the average on the two Sections of the Social Scale, indicating that his relations with both children and adults were below the standard of the others. According to his scores on the separate sections of the Emotional Scale, he was more often distressed than other children, more timid, more easily annoyed, and more excitable. He also

showed more delight than the other children, as indicated by his high score on Section IV. The scores on the social and personal parts of the Character Chart, as may be seen in Figure 94, were only slightly below those of other children, but his score on the emotional part was distinctly below average.

He was a big child for his age but his posture was rather poor. He stood always with bent knees and he usually had his mouth open. He was very sociable with other children but he frequently claimed their toys, complained to adults about them, and sometimes teased them. He often sought adult attention and occasionally wanted to be petted. He was not as a rule disobedient. He cried on very slight provocation, when bumped, when teased, or when his toys were taken. This may have been largely due to the fact that he usually got attention and whatever else he wanted at home by crying for it. He could never take a joke against himself. He was exceptionally startled at noises and cried bitterly at the sound of toy crackers. He occasionally withdrew from the group, and he avoided strange animals.

When annoyed by interference he would squeal, call for help, and sometimes struggle and cry. His lips would droop and his face become flushed. At times he was unusually hilarious. Almost anything would be a joke for him. He would laugh to cause others to laugh, and exclaim with delight at things and events. He occasionally embraced other children, and he welcomed certain foods. He showed joyous excitement over special events by rushing about, giggling and shouting. His most common mannerisms were holding the mouth open and extruding the tongue. He also had somewhat slow and drawling speech.

This child was rather late in growing out of the stage of dependence upon adults, perhaps because his parents were too devoted and attentive. He liked the company of other children but was selfish and inconsiderate in his treatment of them. On the whole he was a sociable type. Emotionally he was somewhat unstable. His physical build and his behaviour were suggestive of Kretschmer's pyknic and cyclothymic type. At times he was fretful, miserable, and easily aroused to tears. At other times he was unusually hilarious and cheerful. His was an entirely different personality from that of subject D.

turned pale occasionally with intense anger. He showed active delight in all manner of things by exclaiming, rushing towards them, jumping about and laughing. He could enjoy any kind of joke. He was very demonstrative in his affections both towards children and grown-ups, and would frequently hug, embrace and kiss the smaller children.

This child was impulsive in all his actions. He showed excessive delighted excitement over a special event and in a noisy group, by rushing and jumping about, shouting, laughing, giggling, and banging furniture. He showed excitement when visitors were present, and at his own successes in achievement. His chief mannerisms were thumb- and finger-sucking, nail-biting, holding the mouth open, grimacing, giggling, and occasional genital manipulation.

When he first came to school he was unable to concentrate on anything for more than a few seconds. He seemed to be hypersensitive to sound and he turned his head whenever a truck was heard on the road. His limbs were constantly moving but he talked very little. His eyes and mouth were usually open and his face serious, and he showed a little apprehensive hesitation in new situations. He entirely ignored adult's disapproval or proffered rewards, and appeared to be mistrustful of grown-ups. He was also very easily made angry. Later, he became talkative, cheerful, fearless, more trustful of adults, less easily angered but always ready for a scuffle.

Here was a hyperactive, impulsive type. His behaviour was sociable and at the same time anti-social, but not unsocial. His emotions were so adequately expressed that his behaviour appeared to be instinctive and impulsive rather than emotional in character. He apparently had strong drives and poor habits of control, little fear and considerable pugnacity. He was exceedingly cheerful and affectionate, and he was popular in the group in spite of his many social offences. It is likely that factors in the home were partly responsible for some of his traits. His mother was active and excitable though very sociable. His father was also excitable, hypersensitive to sound and at times very impatient and easily annoyed. Consequently the child was subjected to inconsistent discipline at home, lax at one time and harsh at another.

The reader will notice, no doubt, that the clinical pictures presented by the last three subjects, D, E and F, are much

more definite than those of the first three, A, B and C, who were younger children. The description of Subject A, according to results on the various scales, shows the transition of a seclusive and somewhat inhibited emotional type into a normally sociable and expressive one. Subject B was also at a transitional stage in his social and emotional development. He was changing from an unsocial and an unemotional type to a more normally social and emotional child.

The description of Subject C gives a clinical picture of a sociable, uninhibited type, preponderantly cheerful. Subject D, on the other hand, is an example of an unsociable and repressed type. Distress was the dominant emotion, and the whole temperament of the child appeared to be schizothymic. Subject E, though not always sociable, presented a contrasting emotional type to that of Subject D. The former (E) showed alternating distress and excessive delight and was therefore cyclothymic in type. Lastly, Subject F is an example of an active, impulsive type, sociable, cheerful, and highly excitable.

CHAPTER XIX

CONCLUSION

THE Social and Emotional Development Scales described in the foregoing chapters represent a method by means of which a systematic study of the social and emotional behaviour of pre-school children was attempted and could be further continued. The social and the emotional behaviour of young children as observed from day to day in a nursery school were analysed into single items, and these were classified roughly and arranged in lists. Interpretative statements and ambiguous adjectives were avoided as much as possible, and only short positive descriptions of behaviour responses to definite situations were included. These lists of behaviour items constitute the Development Scales. They can be used as a framework for the study of the social and emotional behaviour of individuals or groups, and as a basis for comparison between children.

When making such studies with the aid of the scales, it is necessary to observe the children's behaviour in the nursery school daily for about a month. Subsequently the items on the scales are checked according to their applicability to each child. The influence of extraneous chance factors upon the results is thus perhaps less than in the case of tests given in single periods. No laboratory technique is necessary for these studies and no apparatus. The chief drawback to the method is that it is time-consuming.

The nursery school is the required laboratory, and the social and emotion-producing situations which ordinarily occur in school are the test situations. Conditions are therefore limited and controlled to some extent. Occasionally reports of parents show that children behave somewhat differently at home from the way in which they behave at school. Thus daily observation of the children at school cannot give a complete picture of their behaviour. In most cases, however, there are indications in both social and emotional reactions at

school, which show the general characteristics of the child. Particular kinds of behaviour are merely more or less exaggerated at home.

The lists of social and emotional behaviour items are called "Development Scales", because they can be used to show stages in the behaviour development of different groups or different children. The items are not of equal value from the point of view of development, and many of them merely describe different varieties of behaviour. The occurrence of any specific behaviour response, moreover, is too much determined by chance factors in the school situation to permit of the scales being regarded as exact measuring devices. For quantitative purposes the scales are even less reliable than intelligence tests. But, since a child's behaviour must be observed over a considerable period of time and in a variety of different situations before it can be checked on the scales, qualitatively the results on the scales may be of more significance with regard to any particular child than test results.

The behaviour of different children of the same age was found to vary so much that it was not possible to arrange the descriptive items in a gradual scale according to age. Certain forms of behaviour, however, were found to be more characteristic of older than of younger children. The items were accordingly expressed throughout the scales in the form of alternative statements. The first of each alternative was always the behaviour more characteristic of the older and maturer child. Behaviour items which were found to be inapplicable to children under three and a half years of age were also arranged in separate lists, forming the B parts of the scales, to be used only for children over that age.

Numerical scores are obtained by allowing a point for each item in which the first alternative statement is true as regards the behaviour of the particular child under consideration. These scores, as already intimated, can have but little significance for purposes of comparison of different groups of children under different nursery school conditions. Such scores, however, provide a rough and ready means for comparison of the behaviour of different children in a small group, who have been observed at the same time and under approximately the same conditions.

The chief value of the scales lies not so much in the means they offer for quantitative investigations of children's

behaviour as in their usefulness as aids to qualitative studies. With their help systematic studies may be made of individual varieties of behaviour, group similarities and differences, and behaviour types. Description can be made of a child's social and emotional behaviour at any given time; or his various stages of development can be shown by use of the scales at successive intervals. General characteristics of development can also be shown by application of the scales at repeated intervals to groups of children of different ages within the pre-school period.

According to studies made in the McGill University Nursery School with the aid of the Social Development Scale, two- to three-year-old children are much less sociable than older children. They play alone or side by side, but they do not combine into little groups for common play purposes. They interfere with one another, interrupt each other's work, and claim others' toys. Later they learn to leave the other child's work alone, and they prefer to play in little groups of three and four. Two-year-olds are dependent and expect adult help, while three-year-olds are often very independent and refuse even necessary help. Four-year-olds are independent so far as doing little things for themselves is concerned, but they will usually ask adults for necessary help. A complete summary of the developmental stages in social behaviour as observed in the McGill Nursery School has already been given in Chapter VII.

A study of the same children with the aid of the Emotional Development Scale also revealed certain general stages in emotional development. There was less uniformity, however, in the progress of emotional behaviour than in social development. The younger children in the school cried more often than the older ones, largely from fear, loss of security, or discomfort. Three- and four-year-olds cried mostly from annoyance, extreme discomfort, or pain, on the rare occasions when they did cry. The little ones were more easily startled and were more timid in the face of new situations than older children. The two- and three-year-olds were also more given to dramatic and emotional demonstrations of anger than the others, who verbalized their annoyance at interference.

Delight in many different things was found to grow with age, although imitative smiles were common among the youngest children. Laughter occurred more frequently as

confidence and familiarity with the school situation increased. Affectionate responses towards adults and inanimate things, such as dolls and teddy-bears, were more frequent among two- and three-year-old children than among the older ones. On the other hand, affectionate demonstrations towards other children, especially the little ones, were more characteristic of four-year-olds.

The babies in the group often showed apprehensive or distressed excitement over special events and when others were noisy and excited, by stiffening, becoming wide-eyed and silent, and drawing away. The older ones usually showed delighted excitement under such circumstances by running about, laughing, giggling and shouting. Two-year-olds sucked their thumbs and fingers frequently, especially when distressed, frightened or annoyed. Three-year-olds sucked their thumbs on similar occasions but much less frequently, and four-year-old children scarcely sucked their thumbs at all. A more detailed summary of the emotional development of the above-mentioned nursery school children was presented in Chapter XIV.

Many other observations were made in this study beside the general characteristics of social and emotional behaviour at different age periods. Individual varieties of behaviour were noted and possible types delineated. The observed findings with regard to emotional behaviour and the necessity for making some practical classification, moreover, led to the formulation of a new theory of the emotions and their ontogenesis. This theory is outlined in Chapter XV. The suggestion is made that there is an original undifferentiated emotion of excitement present at birth. This consists of a large and random variety of visceral and other somatic responses to any gross stimulation. Certain of these responses become combined, conditioned and differentiated, as a result of experience, to form the more definite emotions.

The first emotions to be differentiated in infancy are distress at shock and interference, and delight in response to satisfying stimuli. During the pre-school period, fear, anger, joy and affection are recognizable as well as the earlier evolved, excitement, distress and delight. Other emotions such as shame, disgust, anxiety, revenge, disappointment, jealousy, envy, hope, elation, parental and sexual affection become differentiated or develop later. The term "affection" is used

in a limited sense to refer to affectionate behaviour and corresponds more or less to McDougall's "tender emotion". It is not used in this book to mean the whole affective life of the individual as is common in traditional psychology.

Similarly, for practical purposes, the expression "emotional behaviour" has been extended in this book to include all manner of affective responses. Feelings and moods discernible only through introspection are no doubt important aspects of some of the behaviour described. But owing to the impossibility of obtaining reliable introspective data from young children, classifications and distinctions have been made solely on the basis of objective behaviour in relation to the stimulating situation.

The usefulness of the Developmental Scales in the study of pre-school social and emotional behaviour in general, in the comparison of the behaviour of different groups, in the comparison of an individual's behaviour with that of a group, in the study of individual varieties of behaviour, and in the isolation of behaviour types was demonstrated in the foregoing chapters, particularly in Chapters XVI and XVIII. The Character-rating Chart described in Chapter XVII was also shown to be of value in making comparisons between the social and emotional characteristics of different children and different groups. The chart is a practical rating scale for the use of nursery school teachers and others. It consists of fifty items describing social, personal, and emotional traits and behaviour. These are arranged in paired opposites, and they are scored similarly to the items in the Development Scales.

Both the Social and Emotional Scales and the Character Chart have demonstrated their usefulness further as diagnostic aids in the analysis of behaviour problems. A general diagnosis as to whether the problem concerns chiefly social behaviour, personal characteristics, or emotional behaviour may be made with the help of the Character Chart. A more detailed analysis, however, can be obtained from the use of the Development Scales. The growth of traits can be watched, and developmental changes can be observed through continued use of the Scales and the Chart. The effect of treatment on a particular child's behaviour may also be followed in this way.

When making diagnoses from results on the scales it is necessary to take into consideration the particular circum-

stances attending the observations on the different children concerned. Allowance must always be made for the influence of chance environmental factors upon the results. A word of warning is also given here against hasty prognosis of behaviour from a particular series of observational studies. Different kinds of behaviour are evoked by different situations. Thus a child who is unsociable at school may be friendly with neighbours in the street. A sociable nursery school child may be shy and retiring later in kindergarten. A timid child may later appear fearless, and an easily angered child may become forbearing.

Social and emotional behaviour are determined by conditions and experiences. As physical conditions of the body and environmental influences change, behaviour changes. But gradually the various elements which recur in successive sets of conditions result in the production of more or less definite behaviour patterns, behaviour trends and personal traits. Social and emotional development take place along individual lines, according to individual experiences; but at the same time certain general lines of development are followed because of the common educational, social, and other environmental influences brought to bear upon every child in a social community.

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